COMMONWEALTH MYCOLOGICAL INSTITUTE
17 MAY 1962

INDEX OF

PHOTOGRAPHS IN

"PHYTOPATHOLOGY"

Volumes 1 to 41
inclusive

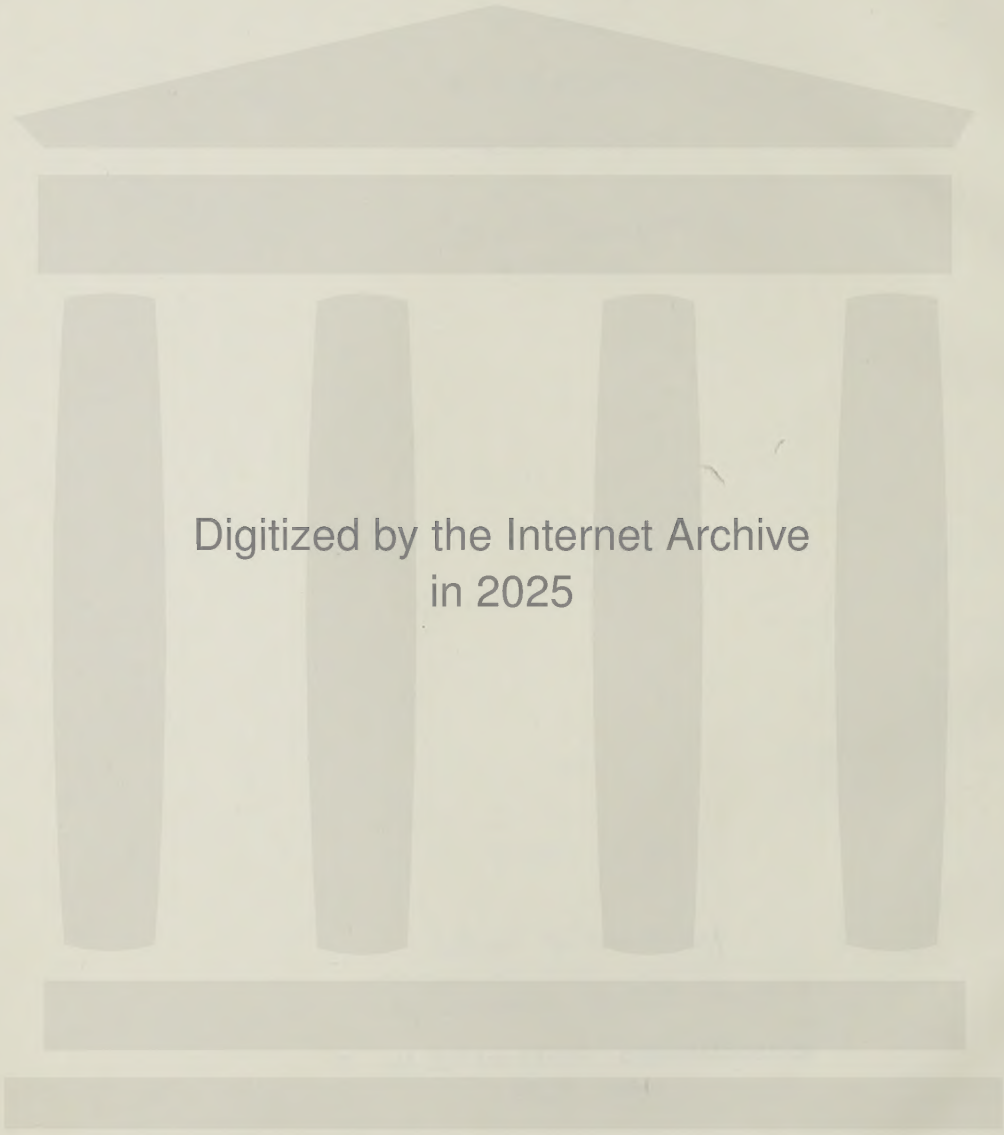
by

G. K. PARRIS

Department of Botany
Mississippi State University
State College, Mississippi

Miscellaneous Publication No. 2
June 1959

8 MAY 1961


Digitized by the Internet Archive
in 2025

https://archive.org/details/phytopathology_1959_1-41_index

INDEX OF PHOTOGRAPHS IN

"PHYTOPATHOLOGY"

Volumes 1 - 41

TABLE OF CONTENTS

	page
Introduction	1
SUBJECT INDEX	1
Abscission	1
of flowers	1
of fruit	1
of leaves	1
Acervuli	1
Aecia	1
Aerial Photography	2
Albication	2
Antheridia (Only)	2
Antheridia and Oogonia	2
Antibiotics (see: Fungicide Studies)	34
Anthocyanescence	2
Anthracnose	2
Apothecia	3
Apparatus and Techniques	3
Control	3
Disease Resistance	3
Fungicides	3
Growing Plants	3
Incubation	4
Infection	4
Inoculation	4
Insects	4
Isolating Pathogens	4
Laboratory Equipment	4
Microscopic Technique	4
Appressoria	4
Asci (Only)	5
Asci and Ascospores	5
Ascocarp	5
Ascomata	5
Bacterial Morphology	5
Bark (Rough)	6
Bark (Scaling)	6
Basidia and Basidiospores	6
Bending	6
of Root	6
of Stem	6
Black leg	6
Black patch	6

page

Black tip 6
Blight 6
Blotch 8
Broom-rape 8
Browning 8
Brown patch 8
Buckskin 8
Bunt 8
Bunt balls 8
Burn 8

Callus 8
Canker 11
Cell Inclusions 11
Chemical Injury 11
Chlorosis 16
Cirrhi 16
Clamp Connections 58
Cleistothecia (see: Perithecia) 76
Conidia (see: Spores) 16
Conidiophores Emerging 16
Conidiophores Bearing Conidia 17
Color Breaking 17
Control of Disease 19
Coremia 19
Crucking 19
Crucking: Splitting of Leaf Along Vascular Bundles 19
: Splitting of Stems 19
Curl 20
Cysts 20
Cytological Study of Pathogen 20

Damping Off 21
Dieback 21
Disease Measurement 22
Disease Resistance 22
Bacteria 22
Fungi 23
Insects 23
Viruses 24
Development of New Physiologic Strains of Pathogen 24
Histological demonstration Of 24
Increase in Resistance 24
Increase in Virulence of Pathogen 24
Inheritance of 24
Loss of Resistance 24
Recovery 24
Resistance to One Pathogen Conferred On Plant by Previous Infection With Same or Another Pathogen (Virus) 24
Resistance to One Pathogen Not Conferred to Plant by Previous Infection With Another or Same Pathogen (Virus) 25
Dissemination of Pathogen 25
Of Bacteria 25

page

Dissemination of Pathogen
  Of Fungi 25
  Of Insects 25
  Of Viruses 25
Distribution of Pathogen 25
Distortion 26
Dodder 27
Downy Mildew (see: Mildew) 45
Drop 27
Dwarfing 28

Effect of One Plant Species on Growth of Another, Adjacent, Species 29
Elevated Vein 29
Enations 29
Entomology 29
  Insect Control 29
  Injury 29
  Morphology 30
Entrance
  Through Stomata 30
  By Direct Penetration: External Cells of Host 30
  ; Internal Cells of Host 31
Epinasty 31
Epiphytology 31
  Effect of Absence of Crop Rotation on Infection 31
  Age of Host Tissues on Infection 31
  Associations of Organisms on Infection 31
  Concentration of Inoculum on Infection 31
  Date of Sowing Seed on Infection
  Depth of Planting Seed on Infection
  Distance of Inoculum from Host on Infection
  Gaseous Vapors on Infection 31
  Injury to Host on Infection 32
  Inoculation Method on Infection 32
  Light on Infection 32
  Moisture on Infection 32
  Nematode-Trapping Fungus on Infection 32
  Host's Nutrition on Infection 32
  pH on Infection 32
  Position of Host on Infection 32
  Pre-Storage Treatment of Host on Infection 32
  Secondary Invader on Infection 32
  Soil Type on Infection 32
  Source of Insect Vector on Infection 32
  Source of Isolate on Infection 32
  Stomatal Movement on Infection 33
  Temperature on Infection 33
  Time of Day Inoculation Performed on Infection 33
Ergot (see: Suppression) 92
Etiolation 34

Fasciation 34
Fasciculation 34
Fernleaf 34
Forking 34

page

Fungicide Studies 34
Fusions 35
  Mycelial Fusions 35
  Spore Fusions 35

Galls (see: Tumefaction) 93
Gases from Plant Parts 35
Gemmae 35
Germination of Fungus-Infected Seed 35
Grafting 35
Growth of Organism in Culture 35
  Nature and Appearance 35
  Antagonistic Effects 39
  Effect of Deficiency of Oxygen on 40
    Chemicals on 40
    Light on 40
    Moisture on 40
    Nutrition on 40
    pH on 40
    Presence of Host on 40
    Temperature on 40
  One Fungus Enwrapped by Another Fungus 40
  Parasitism of One Fungus by Another 40
Growth of Organism in Soil 41
  Antagonism between Organisms 41
Gummosis 41
Guttation 41

Haustoria 41
Heterotopy 41
Host Anatomy (Normal) 42
Host Cytology (Normal) 43
Host Morphology (Normal) 43
Hydrosis 43
Hymenium 43
Hyperplasia 43
Hypoplasia 43

Infection Charts 43
Infection Cushions 43
Intumescence 43

Knot (see: Tumefaction) 93

Lesions 43
  Root 44
  Stem 44
Lichen 45
Losses Due to Disease 45
Losses in Chart Form 45
Losses, Aerial Photos Reveal 45

Manuscript Preparation 45
Microsclerotia 45
Mildew (Areolate) 45
  (Downy) 45
  (Frosty) 45
  (Powdery) 45

[illegible] (see: Chlorosis)
[illegible]mification
[illegible]
[illegible]
[illegible]
[illegible]elium (Microscopic)
Mycorrhiza

Necrosis
  Leaf
  [illegible]
  Stem
  Systemic
  Top
  Vascular
Nematode-Capturing Fungi
Nematode Morphology
Non-Parasitic Effects
Nutrition Effects

Oogonia (Only)
Oogonia and Antheridia (See: Antheridia and Oogonia)
Ooze

Parasitism of One Organism upon Another in Nature
Pathogen Demonstrated within the Host
Pathogen Demonstrated on the Host
Pathogenesis
Pathogenicity Demonstrated
Pathological Histology
Perithecia
[illegible]
Pitting
Plant Growth
  Effect of Calcium
    Chemicals
    [illegible]
    Day Length
    Iron
    Light
    [illegible]
    Manganese
    Nitrogen
    Phosphorus
    Potassium
    [illegible]
    Soil Moisture
    Moisture Content of Seed and Type of Storage of Seed
    Soil and Air Temperature
[illegible] Avena sativa and [illegible]
    and L. esculentum

Powdery Mildew (see: Mildew)
Prolepsis
Pseudosclerotia
Pycnia (see: Spermogonia)
Pycnidia
Pycnidiospores (see: Spermatia)

Rhizomorphs
Ring Rot
Root:
Rosette
Rot
Russet
Rust (see also: Smut)

Scab
Scald
Sclerotia
Sclerotium
Scorch

page

[illegible] 70
[illegible] 70
[illegible] 70
Silvering 70
Smut (see: Suppression) 92
Snowmold 70
Sorus (see also: Rust) 70
[illegible] 71
[illegible] 71
Spermogonia 71
Spindle-Tuber 71
Sporangial Germination 71
Sporangial Morphology 71
Spores 72
  Spore Balls 72
  Spore Formation 72
  Spore Germination 72
    Aeciospores 72
    Ascospores 72
    Basidiospores 73
    Chlamydospores 73
    Conidia 73
    Oospores 74
    Parthenospores 74
    Spermatia (see: Basidiospores) 73
    Teliospores 74
    Uredospores 74A
    Zoospores 74A
  [illegible] 74A
    Fungicides 74A
    Light 74A
    Plant Extracts 74A
    Substrate 75
  Spore Morphology 75
    Aeciospores 75
    Ascospores 75
    Basidiospores 75
    Chlamydospores 75
    Conidia 76
    Endospores 80
    Oospores 80
    Parthenospores 80
    Scolecospores 80
    [illegible] 75
    Teliospores 80
    Uredospores 80A
    Zoospores 80A
Sporodochia 81
Spot 81
  [illegible] 81
  [illegible] 81
  Leaf Spot 82
  Ring Spot 90
  Seed Spot 91
  [illegible] 91

Tissue Culture (see: Plant)
Toadstool
Training
Transpiration
Trapping
Trimming (see: Pruning)
Tuberculation
Turgescence
Twining

Umbels

Vaporization
Vaporization: Effect of Temperature on
Vascularization
Vein Discoloration
Virescence
Virus
Virus Studies, Miscellaneous

Weak and Prostrate Plant
White Rust (see: Scrub)
Wilt
Wind-Breaks

Yellowing

Zoology

PATHOGEN INDEX (A - Z)

INTRODUCTION

There is a need for an Index of Photographs pertaining to plant pathology in all its phases, including mycology, bacteriology, virology, and nematology. The first 40 volumes of "Phytopathology," the official journal of the American plant pathologist, have been indexed, but these indices do not tell of the existence, or nature of, illustrations present. This Index of Photographs fills the gap in our knowledge.

USING THE INDEX

The contents are divided into two main sections, the "Subject Index" and the "Pathogen Index." Under the former are listed such topics as Apparatus and Techniques, Disease Measurement, Disease Resistance, Dissemination of the Pathogen, Distribution of the Pathogen, Epiphytology, Fungicide Studies, Growth of the Organism in Culture, Normal Host Anatomy, Normal Host Cytology, Normal Host Morphology, Losses, Manuscript Preparation, Pathogen Demonstrated Within the Host, Pathogenesis, Pathogenicity, Pathological Histology, Plant Control, Scientists, Signs, Symptoms, etc. There are sub-headings of certain subjects.

Under the Pathogen Index the Latin names of the Bacteria, Fungi, Nematodes, and Viruses and the common names of Viruses which cause plant diseases are listed in alphabetical order. Synonymy in nomenclature is given.

Causal agents, living or non-living, are listed beneath each subject heading. Next is given the name of the plant photographed, either its Latinized name or its common name; whichever one the contributor of the photograph used is recorded. The volume(s) and page number(s) follow the name of the plant.

The first 20 volumes of "Phytopathology" and the first quarter of volume 21 contain "Plates" of photographs. Thereafter, the use of Plates is discontinued, and all illustrations, except the photographs of deceased plant pathologists (see: Scientists) which are not given a designating symbol, are listed as Figures. The photographs on Plates are indexed by the page numbers the Plate(s) insert. Unless this citation method is understood, it may be confusing for the user of the Index to locate the desired photograph when more than one Plate is present.

Clarification of concepts and definitions of terms used in the Subject Index seems in order at this point. Most contributors to "Phytopathology" seem to be interested in only a single symptom, or sign, when they write the legends to the photographs that accompany their articles. Other symptoms, or signs, sometimes appear in photographs, and the present compiler has catalogued additional facts when he viewed the photographs without prejudice. The heading "Antheridia (Only)" means that the photograph shows only the male element of the fungus; where both male and female parts are shown, the heading is "Antheridia and Oogonia." "Apparatus and Techniques" is a heterogeneous collection that was difficult to organize, and the compiler recommends its contents for more than passing study since a wealth of useful material is found here; illustrative of this point are the sub-headings "Control," which refers to Disease Control, and "Inoculation," "Incubation," and "Infection," stages of "Pathogenesis."

"Conidia, etc." is a heading under "Spore Germination" and "Spore Morphology," respectively. "Chlorosis" is defined as a retardation in, or suppression of, normal development of chloroplyll; and "Mosaic" is a synonym. "Conidia" refers to the conidiophores. "Dwarfing" and "Stunting" are synonyms. "Entrance" refers to the method by which the pathogen moves from the exterior to the interior of the host plant, that is, through natural openings, or by direct penetration. (The only natural opening pictured in these 11 volumes of "Phytopathology" is a stoma, and the heading "Through Stomata" is sub-divided into "Penetration...External Cells of Host" and "Penetration...Internal Cells of Host."

"Fusicums" includes all fungi which produce fusiform spores. (Actually, fusicums are a large group, and a specialist indexer might do a better job; the headings adopted sometimes are interrelated. "Fusicums" occurred only in fungi, of mycelium (including "Growth of Colonies in Culture" which includes photographs of the pathogen growing on artificial media. "Lesions" refers to any diseased or infected area on the host plant; sub-headings are "Root-lesions" and "Stem-lesions." (Some stem-lesions could be called "Canker.")

"Mycelium (Macroscopic)" refers to the gross appearance of abundant fungus hyphae, associated with a diseased plant part, visible to the naked eye, and photographed with the minimum of equipment. Its companion heading is "Mycelium (Microscopic)," "Necrosis" refers to the killing of plant tissue or plant organs by disease. "Vascular Necrosis" refers to the darkening and killing of vascular elements and associated parenchyma.

"Non-Parasitic Effects" includes the effects of non-living agencies on plants. The contents listed under "Nutrition Effects" could have been included, but they are kept separate for convenience in finding. "Rot" has been divided into a number of sub-headings according to the kind of rot, the appearance of the rot, or the plant part affected. "Spermatia" includes the specialized reproductive cells (called) of certain fungi, chiefly the rusts, which have also been called pycniospores. "Spores" includes all types of reproductive cells of the fungi (except spermatia) that germinate, regardless of their genetic origin. Spermatia are excluded from the classification "Spores," since they do not germinate; also excluded are individual sporelike cells, like cells or masses found in sclerotia, ritzomorphs, etc. The "sporangia" of the genus Peronospora, which germinate directly like conidia, could be listed under "Spores," but are placed with "Conidia." "Conidia" refers to asexually formed spores. In rusts known to have both sexual and asexual stages, both should be referred to as aecial stage; when a uredial stage is found listed only "uredia," it means that the aecial stage is photographed. The term "Chlamydospores" as used here does not include "teliospores," and this stage of a rust has a separate heading. Separate headings are given for "Spore Germination" and "Spore Morphology."

"Spot" has several listings depending on the type of symptom or the plant part affected. "Rust" is listed with "Uredia," or as "Rust," "Teliospores" includes all kinds of rusting and uredinia. "Tissue Morphology" summarizes data on electron photomicroscopy.

ABSCISSION
Of flowers
Lygus bug injury, bean 36:510
Of fruit
Guignardia sp., grape 13:518
Phomopsis citri, citrus 2:112
unidentified cause, cotton 4:332
Of leaves
Adelopus gaumanni, Pseudotsuga taxifolia 30:653
Alternaria ricini, castor bean 35:252
Cephalosporium diospyri, Diospyros virginiana 40:308
Cercospora beticola, beet 8:134
Cercospora thujina, Thuja orientalis 35:183
Corticium microsclerotia, bean 29:560
Cronartium ribicola, Ribes alpinum 29:983
Gnomonia veneta, sycamore 41:195
Hypodermella laricis, Larix occidentalis 13:505
Keithia thujina, Thuja plicata 3:361
Puccinia psidii, Pimenta officinalis 28:162
Rhizosphaera kalkoffi, Picea pungens 37:508
Rosellinia herpotrichioides, Tsuga canadensis 27:306
Tranzschelia pruni-spinosae, prune 41:195
Virus
fig mosaic, fig 23:893
peach yellows, peach 30:324
potato Y-virus, potato 26:599; 29:52
tobacco mosaic, pepper 24:988
Non-parasitic
boron deficiency, sweet potato 33:185
illuminating gas injury, bean 36:510

ACERVULI
Brachysporium trifolii 10:438
Coccomyces kerriae 7:401
Colletotrichum falcatum 34:834, 835
Colletotrichum fragariae 21:741, 743

ACERVULI (Cont'd.)
Colletotrichum lilii 34:567
Colletotrichum phomoides 38:254
Colletotrichum pisi 11:500
Colletotrichum schizanthi 1:122
Colletotrichum truncatum 41:979
Colletotrichum sp. 16:345
Coryneum asperulum 36:776
Coryneum berckmanii 30:593, 596
Coryneum microstictum var. staphyleae 21:1164
Elsinoe australis 28:74
Elsinoe ledi 21:968
Elsinoe randii 28:76, 77
Gloeosporium cingulatum 17:774
Gloeosporium piperatum 16:345
Gloeosporium rufomaculans 1:202
Gloeosporium venetum 23:390
Gloeosporium sp. 19:605
Glomerella gossypii 33:670, 671
Glomerella olivarium 32:643
Lecanosticta acicola 31:64, 66
Marssonina melonis 37:587
Melanconis juglandis 13:434
Melanconium sp. 6:392
Mollisia carliana 12:379
Pestalotia guepini 19:232
Pestalotia pezizoides 19:232
Pestalotia podocarpi 24:1027
Pestalozzia funerea 4:383
Pestalozzia scirrhaciens 10:385
Pseudopeziza ribis 26:117
Sphaceloma ampelinum 23:390
Sphaceloma fawcettii var. scabiosa 26:195
Sphaceloma fawcettii var. viscosa 26:193
Sphaceloma lippiae 29:655
Titaeospora detospora 36:195

AECIA
Aecidium butlerianum 9:574
Cronartium ribicola 8:439; 25:254
Cronartium strobilinum 12:122
Gymnosporangium blasdaleanum 4:270
Gymnosporangium clavipes 29:804, 805
Gymnosporangium germinale 22:724
Gymnosporangium globosum 29:804
Gymnosporangium juniperi-virginianae 12:191; 17:541, 542; 23:548; 29:804, 805

[illegible]
[illegible] 19:1[illegible]
Pythium butleri 29:543
Pythium dissectosum 30:193, 198
Pythium graminicolum 28:678
Pythium helicoides 29:413
Pythium mercipium 31:500, 501
Pythium mastophoron 29:1009, 1010
Pythium megalacanthum 29:1020, 1022, 1026
Pythium myriotylum 35:271, 275
Pythium oedochilum 31:482, 484, 485
Pythium oligandrum 36:787, 789, 792, 794, 797
Pythium ostracodes 35:280, 281
Pythium paligenes 31:490, 491
Pythium parasexandrum 30:206, 207
Pythium periilum 30:201
Pythium periplocum 29:407
Pythium polymastum 29:1013, 1014, 1015
Pythium salpingophorum 36:812
Pythium vexans 36:826, 827, 831

ANTIBIOTICS (See Fungicide Studies)

ANTHOCYANOSOMOSE
Bean, Annulus orae var. phaseoli 40:354
Sweet cherry, "buckskin" virus 21: 382

ANTHRACNOSE
Colletotrichum fragariae, strawberry 21:748
Colletotrichum lindemuthianum, bean 5:309, 310, 311; 8:614
Colletotrichum villosum, vetch 35:978, 980
Colletotrichum sp., tobacco 35:599
Elsinoe lodi, Ledum glandulosum 21: 966, 968; 23:374
Elsinoe randii, Hicoria pecan 23: 76
Gloeosporium allantosporum, Rubus leucodermis 19:602
Gloeosporium necator, Rubus sp. 36:1044
Gloeosporium venetum, Rubus sp. 36:1044
Gloeosporium sp., tobacco 35:599
Glomerella cingulata, lespadeza 36:525
Glomerella cingulata, Ligustrum vulgare 15:252, 253

ANTHRACNOSE (Cont'd.)
Glomerella cingulata, peach 41:648
Glomerella cingulata, Ziziphus jujuba 21:1186
Marssonina melonis, muskmelon 37:584
Plectodiscella veneta, raspberry 7:84; 19:602
Pseudopeziza ribis, currant 25:137
Pseudopeziza ribis, gooseberry 26:117
Sphaceloma lippiae, Lippia lanceolata 29:855
Sphaceloma rosarum, rose 28:361
Sphaceloma symphoricarpi, Symphoricarpus sp. 28:374
Sphaceloma sp., Mentha spp. 28:104

APOTHECIA
Atropellis pinicola 20:558, 567
Cenangium abietis 1:182; 11:167
Cenangium piniphilum 11:294
Dasyscypha calycina 27:54
Dasyscypha fusco-sanguinea 19:584
Godronia cassandrae 19:1019, 1020
Keithia thujina 6:362
Lophodermium brachysporum 3:133, 134
Ovulinia azaleae 30:238
Schizoxylon microsporum 28:744
Scleroderris abieticola 20:560, 567
Sclerotinia americana 17:792
Sclerotinia camelliae 30:169
Sclerotinia fructicola 29:339, 438; 31:727; 32:635
Sclerotinia gladioli 24:403
Sclerotinia gregaria 11:225
Sclerotinia intermedia 14:384
Sclerotinia libertiana 6:256, 269; 12:18; 13:31
Sclerotinia pennacis 2:30
Sclerotinia ricini 9:963
Sclerotinia sclerotiorum 15:259; 21:409, 411; 26:187; 27:101; 33:87
Sclerotinia trifoliorum 7:436; 39:871; 39:159

APPARATUS AND TECHNIQUES
Control
Bulb treatment, hot water 14:499
Counting nematodes 40:1117
Seed treatment, heat 33:91
Separation of nematodes from soil 35:295; 40:1112; 41:890

APPARATUS AND TECHNIQUES (Cont'd.)
Control (cont'd.)
Soil sterilization 9:358; 30:602; 32:960
Disease Resistance
Testing for 29:949; 30:156, 157
Fungicides
Appearance of pelleted seeds, onion 38:819
Application of fungicides 18:960; 29:105, 217; 30:215, 221, 497
Evaluating fungicides 22:144, 145, 153; 24:815; 29:106, 642; 30:497; 31:1110; 39:173; 40:655, 656, 659
Exposing plants to fungicide vapors 29:178, 180
Laying-out field plots 9:104; 33:586
Photographic prints of foliage sprayed with fungicide 24:420
Loosening and splitting barley hulls following treatment with fungicide (formalin) 32:1017
Settling rate and fractionation of fungicides 32:157
Treating small samples of seed with fungicides 21:1205
Growing Plants
Air circulation in hot bed 15:1028
Aseptic plant growth 10:427; 21:53; 35:426; 38:783
Grafting 24:1038
Growing the plant 32:468, 469, 470
Humidity control 11:456; 13:230, 233; 21:451, 771
Light control 35:504, 507
Measuring leaves 19:330; 33:1094
Moisture recording 24:[illegible]
Nutrient solution culture 38:207; 31:552
Rain recording 26:1065
Root observation boxes 19:617, 358, 359, 408, 409, 411; 31:578; 32:623, 624, 625; 34:508; 36:667; 38:646
Soil sampling 6:245; 41:569
Temperature control 11:456; 14:385, 386, 387, 390, 391; 16:230, 235; 21:451; 32:47[illegible], [illegible]214, 215, 512, 513; 40:[illegible]

Incubation
Insects
Inoculation
Isolation
Laboratory Equipment
Microscopic Technique

APPRESSORIA (Cont'd)
Pythium megalacanthum 23:1020
Pythium cedrochilum 31:479
Pythium salpingophorum 36:809
Sclerotinia ricini 9:563
Stagonospora curtisii 23:780
Trichothecium arrhenopum 33:250

ASCI (Only)
Elsinoe dolichi 35:344

ASCI and ASCOSPORES
Atropellis pinicola 20:567
Atropellis treiaseai 20:567
Calonectria graminicola 5:242
Chaviceps yenagoensis 32:610
Coccomyces kerriae 7:402,403,404
Cryptosporella viticola 1:118
Diaporthe batatatis 2:155
Diaporthe crotalariae 25:603
Diaporthe phaseolorum var. batatatis 38:626
Diaporthe phaseolorum var. sojae 38:629
Diaporthe vexans 32:542
Diaporthe vaccinii 30:443
Diaporthe sp. 30:367
Didymosphaeria oregonensis 21:915
Elsinoe canavaliae 23:694
Elsinoe fawcetti 26:335
Elsinoe parthenocissi 32:425
Erysiphe cichoraceaurum 31:523
Erysiphe lagerstromiae 23:518
Eutypella angulosa 28:744
[illegible]ella fujikuroi var. subglutinans 26:667
Gibberella moniliformis 25:603
Gnomonia dispora 26:1027
Godronia cassandrae 19:1021
Guignardia aesculi 6:11
Herpotrichia nigra 3:158
Hypomyces ipomoeae 5:242
Keithia thujina 6:362
Leptosphaeria coniothyrium 21:253
Lophodermium brachysporum 3:124
Mycosphaerella angulata 32:75
Mycosphaerella brassicola 5:263
[illegible]
Mycosphaerella ligulicola 39:799
Mycosphaerella ostariensis 5:8
Mycosphaerella Payostegiae 35:827
Mycosphaerella populorum 31:245
Mycosphaerella solani 3:242

ASCI and ASCOSPORES (Cont'd.)
Mycosphaerella [illegible]ulgarospora 31:969,971
Mycosphaerella vulgaris 21:1163
Nectria discophora 3:242
[illegible]
Neopeckia Coulteri 3:156
Ophiobolus fuliginis 24:268
Ophiobolus sp. 24:969
Ottiia amica 5:50
Ovulinia azaleae 30:240
Physalospora cortices 32:1070,1071
[illegible]
Physalospora obtusa 41:481
Physalospora tucumanensis 34:809
Physalospora zeae 35:206
Physalospora zeicola 23:66
Plectodiscella veneta 7:89
Rosellinia herpotrichioides 27:359
Saccharomyces sp. 6:396
Schizoxylon microsporum 28:746
Scleroderris abietiola 20:567
Sclerotinia gladioli 24:402
Sclerotinia ricini 9:566
Sclerotinia trifoliorum 7:437
Sphaerulina rubi 33:992
Systremma acicola 31:66
Valsa sordida 30:462
Venturia inaequalis 32:[illegible]

ASCOCARP
Coccomyces kerriae 7:402,403
Plectodiscella veneta 7:[illegible]
Pseudobalsamia microspora 34:[illegible]

ASCOMATA
Elsinoe fawcetti 26:356
[illegible]
Elsinoe randii 26:[illegible]

BACTERIAL MORPHOLOGY
Aplanobacter agropyri 6:350
Bacillus aroideae 8:[illegible]
Bacillus "C" 32:[illegible]
Bacillus morulaeus 7:[illegible]
Bacterium marginatum 37:353
Bacterium solanacearum 22:[illegible]
Bacterium tabacum 20:190,191
Bacterium tumefaciens 20:[illegible]
Erwinia amylovora 17:406; 26:[illegible]; 27:705; 29:150
Erwinia carnegieana 32:309
Mycobacterium rubiaceearum 18:[illegible]
Phytomonas corylina 30:714
Phytomonas medicaginis var. phaseolicola 15:927

BACTERIAL MORPHOLOGY (Cont'd.)
Phytomonas polycolor 20:699
Pseudomonas acubicola 26:258
Pseudomonas radicicola 18:207
Streptomyces sp. 38:901
Rod-shaped symbiont of Pseudococcus brevipes (mealy bug) 26:179
Bacteria in larva of seed corn maggot 21:392,393,394,395,396,397,398,399,400,401

BARK (Rough)
Apple virus, apple 32:436
Pear virus, pear 32:436
Pyracantha virus, Pyracantha gibbsii yunnanensis 32:436
Rimocortius Kwanzani, cherry 32:429
Rose virus, rose 32:436
Tung virus, tung 39:718

BARK (Scaling)
Citrus blind pocket psorosis virus, citrus 33:855
Citrus psorosis virus, citrus 24:660; 32:412
Citrus psorosis A virus, citrus 33:841
Citrus psorosis A,B virus, citrus 33:848
Orange gummosis, citrus 6:35
Pittosporium Tobira virus, Pittosporium Tobira 37:193
Pear stony pit virus, pear 29:263
Citrus chemical treatment 34:243

BASIDIA and BASIDIOSPORES
Corticium areolatum 30:124
Corticium galactinum 30:143
Corticium koleroga 17:704; 23:879
Corticium praticola 19:1091,1092
Corticium vagum 19:1091; 29:374
Rocrenertium musicola 8:203
Exobasidium parvifolii 17:216
Hypochnus solani 19:1091
Melampsora farlowii 29:464
Melanopsichium eleusinis 37:482
Microstroma juglandis var. robustum 7:43,44
Puccinia stakmanii 33:384
Sphacelotheca panici-miliacei 33:570
Sphacelotheca sorghi 31:256,257
Sorosporium syntherismae 33:570
Tilletia tritici (dwarf bunt strain) 33:733

BASIDIA and BASIDIOSPORES (Cont'd.)
Tranzschelia pruni-spinosae typica 29:76; 31:191
Urocystis agropyri 39:357
Uromyces hobsoni 29:785
Ustilago crameri 33:1124,1128
Ustilago hordei 31:179
Ustilago levis 34:482
Ustilago nigra 33:201
Ustilago striiformis 37:731
Ustilago zeae 29:479; 33:752

BENDING
Of Root
Sugar-beet curly top virus, sugar-beet 7:[illegible]
Of Stem
Agropyron sibiricum 31:675
Agropyron Smithii,Aplanobacter agropyri 6:350
Agropyron cristatum 31:675
Bromus pacificus 31:675
Bromus tectorum 31:675
Triticum aestivum 31:675

BLACK LEG
Bacillus aroideae, tobacco 21:973
Phoma lingam,cabbage 1:25; 8:382,384,418; 41:825

BLACK PATCH
Mycelia Sterilia,clover 41:1042

BLACK TIP
Cercospora musarum,banana 18:532,534
Sugar-beet curly top virus,sugar-beet 7:202

BLIGHT
Alternaria compacta,castor bean 34:226,227
Alternaria ricini,castor bean 35:250,251; 37:184
Alternaria solani,potato 15:286
Alternaria sp.,Hevea brasiliensis 37:610
Aphelenchoides fragariae,Asplenium nidus 36:893
Ascochyta abelmoschi,okra 40:1057
Ascochyta chrysanthemi,chrysanthemum 39:790
Ascochyta piniperda,Picea Abies 4:72
Bacillus amylovora,apple 3:276
Bacillus amylovora,cherry 5:316

BLIGHT (Cont'd.)
Bacillus amylovora,pear 5:510; 6:292
Bacillus amylovora,Yakimino 6:292
Bacterium sojae,soybean 11:340
Botrytis cinerea,Antirrhinum sp. [illegible]
Cercospora thujina,Thuja orientalis 35:182,183
Chilonectria cucurbitula,jack pine 37:759
Choanephora cucurbitarum,Amaranthus blitum 14:424
Cladosporium cucumerinum,cucumber [illegible]
Colletotrichum sp., hydrangea 19: 1123
Colletotrichum sp., peony 19:1123
Coniothyrium rosarum,rose 9:404,409
Corticium microsclerotia,bean 29: 561
Corticium microsclerotia, tung 34: 649
Cunninghamella maineckella, Pinus [illegible]
Diaporthe phaseolarum var. sojae, soybean 37:446
Didymella applanata, raspberry 21:250,252,255,257
Erwinia amylovora,apple 21:902
Erwinia amylovora,Spiraea Van Houttei 21:91
Erwinia amylovora, f. rubi,raspberry 41:916
Gloeosporium cingulatum, raspberry 17:774
Gloeosporium gloeosporioides, Citrus spp. 2:234
Guignardia bidwellii f. muscadinii, grape 36:906,908
Hapalosphaeria deformans,blackberry 33:137,139
Helminthosporium victoriae, oat 37:791
Hendersonia diplodioides, apple 5:58
Macrophomina phaseoli, bean 28:632
Melampsora farlowii,Tsuga canadensis 29:463,464
Monilinia fructicola,peach 40:1145
Olpidium brassicae,tobacco 37:425
Peronospora tabacina,tobacco 26: 771,775
Pestalozzia funerea,Picea Abies 4:384

BLIGHT (Cont'd.)
Phomopsis juniperovora,Pseudotsuga taxifolia 16:910,914
Phomopsis vaccinii,Vaccinium corymbosum 26:140
Phyllesticta sp., lilac 19:1123
Phytomonas aptata,sugar beet 36:850
Phytomonas asplenii,Asplenium nidus 36:759,835
Phytomonas juglandis,walnut 34:381, 382
Phytomonas medicaginis var. phaseolicola,bean 30:262
Phytophthora capsici,pepper 22:773; 40:747
Phytophthora erythroseptica, Zantedeschia rehmannii 37:383,384
Phytophthora infestans,potato 11: 456; 37:628
Phytophthora infestans,tomato 9:210
Phytophthora paeoniae,peony 18:892, 896
Phytophthora palmivora,avocado 38: 1085
Phytophthora syringae,lilac 14:504
Phytophthora spp.,pineapple 24:175
Rhizoctonia batoticola,bean 23:953, 954
Rhizoctonia microsclerotia,fig 7: 111,112
Rhizoctonia ramicola,Elaeagnus pungens 41:616,617
Rhizoctonia solani, aster 26:982
Rhizoctonia solani,Lobelia erinus 19:588
Rhizoctonia solani,wheat 41:376
Sclerospora Butleri,Eragrostis aspera 23:588
Sclerospora noblei,Sorghum plumosum 19:1109
Sclerospora northi,Erianthus maximus var. Seemanni 19:962
Sclerotinia camelliae,camellia 30:167
Sclerotinia laxa,apricot 31:720
Sclerotinia laxa,cherry 31:721; 33:1212; 38:858,860
Sclerotinia laxa,peach 31:725
Sclerotinia laxa,prune 31:727
Sclerotinia libertiana,celery 12:17
Sclerotinia libertiana,lemon 6:270
Sclerotinia seaveri,Prunus serotina 30:89
Sclerotium fulvum,Sisymbrium sp. [illegible]

Sclerotium fulvum, Thiaspi arvense
Sclerotium fulvum, wheat 27:1115
Sclerotinia rolfsii, carrot 21:1129,
Septoria pisi, pea 3:58
Sphaerotheca erysisi, pea mildew
Stemphylium botryosum var. trego-
Tylenchus dipsaci, narcissus 14:
Viruses
Infectious chlorosis, lettuce
Latent mosaic, petunia 43 and
Tobacco ring spot, soybean 36:
Tomato top browning, tomato 29:
Unidentified virus, sugar beet
Witches' broom, pea 27:858
Xanthomonas phaseoli, bean 36:795
Zinc deficiency, peach 17
Zonate leaf spot, soybean 36:
Ergot, Claviceps purpurea, barley 20:270
Fusarium diseases, pecan 28:1046
Guignardia aesculi, horse-chestnut
6:39 (in color)
Powdery mildew, avocado 21:
236, 237; 29:536
Leaf blotch, peach 36:224
Tomato damping-off, tobacco
Rhizoctonia solani, tomato 23:350
Puccinia graminis tritici, wheat
Rhizoctonia solani, cress 9:90
Rhizoctonia solani, iris 9:175
Sweet cherry
31:919; 40:708, 709
BUNT
Tilletia brevifaciens, wheat 41:
1036
Tilletia caries (dwarf bunt strain),
wheat 39:695
Tilletia laevis, Lolium multiflor
22:855
Tilletia tritici, wheat 9:181;
BUNT SMUT
Tilletia caries (dwarf bunt
wheat 39:695
Tilletia laevis, Lolium multi
Tilletia laevis, wheat 26:856, 880
Tilletia tritici, wheat 22:849; 26:
1092; 36:106, 888, 32:124
BURN
Benzol burn, tobacco 30:216
Cyanide burn, bean 20:422, 423,
426, 427, 429
Cyanide burn, cucumber 20:424
Nicotine burn, chrysanthemum 40:
561
Sand burn, pecan 17:661
CANKER
Nectria sp., maple 29:335
Physalospora corticis, blueberry
32:1069
Woundhealing, poplar 31:1175, 1179
CANKER
Alternaria macrospora, cotton 31
665
Alternaria solani, tomato 35:20
42:133
Alternaria solani, toxic pri
tomato 41:1109
Alternaria sp., maple 1
889
Leptothyrium sp., pea 16:270
Nectria cinnabarina, apple 1:108
6:405
Pseudomonas corticolum (apple
radish 20:504

s cinerea, lupine 2
e sp., tomato 9:297
abietis, Pinus strobus
, Abies balsamea
, coffee
nalis 33:153
Chalaropsis thielavioides, rose 30:794
Cladosporium vignae, cowpea 15:462
Coniothyrium fuckelii, apple 1:102
Coniothyrium fuckelii, rose 1:102
Coniothyrium sp., apple 17:737
Corticium solani, Gizania rige
ticium vagum var. solani 5:62
artium ribicola, Pinus monticola 23:
Cronartium ribicola, white pine 19:276
Cryptodiaporthe castanea, Castanea
cylindrocladium scoparium 7:411
Cytospora cenisis littoralis, Cupressus sempervirens var. stricta 31:698
ypha fuscosanguinea, white e 19:582, 584
the crotalariae, Crotalaria abilis 23:597, 598, 599
eras, rose 25:888
pinea, Pinus nigra 33:
Dothiorella quercina, Quercus alba 21:914
Endothia parasitica, chestnut 3:
la parasitica, Acer rubrum
Fabraea maculata, Acer saccharum 29:735, 736
Fusarium martii var. pisi, pea 16:276
Fusarium oxysporum f. delphinii, delphinium 39:913
Fusicoccum pyrorum, apple 13:230
Gibberella baccata, apple 16:624
Gloeosporium cingulatum, raspberry 17:774
Gloeosporium perennans, apple 2
398, 402, 29:741
Glomerella cingulata, Ligustrum vulgare 15:266
Glomerella cingulata, lupine 33:251
Glomerella glycines, soybean 30:345
Glomerella gossypii, cotton 31:163
Guignardia bidwellii f. muscadinii grape 36:908, 909
Gymnosporangium juniperi-virginianae, apple 17:541
Helminthosporium sacchari, Napier grass 32:48
Heterosporium tropaeoli, nasturtium 40:555
Hypoxylon pruinatum, poplar 14:143: 33:75
Macrophoma fici, fig 8:25
Macrophomina phaseoli, bean 28:628, 630, 631
Macrophomina phaseoli, Chamaecrista procumbens 34:1080
Macrosporium sp., tomato 10:416,
Monochaetia mali, apple 25:1117
Mycosphaerella populorum, Populus szechuanica 31:243
Nectria cinnabarina, mimosa 34:985
Nectria galligena, pear 11:456, 458
Nectria sp., maple 29:355
Pestalotia macrotricha, Rhododendron catawbiense 20:87
Phoma lingam, cabbage 8:407
Phomopsis abietina, Abies pectinata
Phomopsis gardeniae, gardenia 28:
Phomopsis juniperovora, Juniperus virginiana 16:914
Phomopsis pseudotsugae, Pseudotsuga douglassi 19:980, 986

[illegible]
[illegible] sp., [illegible] dentata 27:1104
Phomopsis sp., peach 30:964
Phyllosticta solitaria, apple 14: 283, 568; 20:844, 846
Phymatotrichum omnivorum, cotton 31:360
Physalospora cercidis, bluebunny 28:1060, 1070
Physalospora malorum, apple 17: [illegible]
Physalospora miyabeana, willow [illegible]
Phytomonas acoris, Acer macrophyllum 29:968
Phytomonas beticola, beet 21:15
Phytomonas carotae, carrot 34:416
Phytomonas pruni, peach 23:788, 791, 795
Phytophthora cactorum, Cedrus deodora 27:1108
Phytophthora cactorum, Eucalyptus sp., 27:1103
Phytophthora cactorum, loquat 32: 406, 407
Phytophthora cactorum, peach 25: 801, 804; 27:1108
Phytophthora cinnamoni, cinchona 41:643
Phytophthora citrophthora, Castanea sp. 27:1109
Phytophthora citrophthora, Cedrus deodora 27:1108
Phytophthora citrophthora, Eucalyptus sp. 27:1108
Phytophthora inflata, elm 39:483, [illegible]
Phytophthora infestans, tomato 1:286; 34:380
Phytophthora parasitica, cinchona 41:644
Pseudomonas cerasi, pear 24:835
Pseudomonas citri, citrus 23:821
Pseudomonas papulans, apple 7: 203, 208
Pseudomonas pruricola, plum 21: 1109
Pycnocystis acoris, Acer macrophyllum 29:968
Rhizoctonia bataticola, bean 23: [illegible]
Rhizoctonia solani, alfalfa 33: 1082; 35:835; 36:640; 39:929, [illegible]
[illegible] (cont'd.)
Rhizoctonia solani, bean 26:246
Rhizoctonia solani, celery 39:471, 472
Rhizoctonia solani, clover 35:835
Rhizoctonia solani, cotton 31:163; 32:642
Rhizoctonia solani, pea 16:276
Rhizoctonia solani, potato 25:754
Rhizoctonia solani, soybean 40:824
Rhizoctonia solani, sugar-beet 27: 1180
Rhizoctonia solani, tomato 39:951
Rhizoctonia zeae, corn 24:1293
Rhizoctonia sp., Matthiola incana [illegible]
Ronelinia caryae, Carya ovata 12: 38
Schizoxylon microsporum, Acer rubrum 28:740
Schizoxylon microsporum, Acer saccharum 28:740
Scleroderris abieticola, Abies grandis 20:560
Sclerotinia cinerea, peach 3:110; 11:892
Sclerotinia laxa, cherry 38:860
Sclerotinia laxa, peach 31:725
Sclerotinia sclerotiorum, hollyhock 34:589
Sclerotium rolfsii, peach 17:440
Septoria musiva, poplar 36:153
Stereum murrayi, various hardwoods 31:84
Streptomyces scabies, pea 39:445
Streptomyces scabies, radish 39: 445
Streptomyces scabies, soybean 39: 445
Strumella coryneoidea, oak 35:673; [illegible]
Thielavia basicola, ginseng 2:190
Thyrostroma compactum, Ulmus [illegible] 28:802
Tubercularia fici, fig 1:16
Tubercularia ulmea, Ulmus pumila 28:802
Viruses
Elm 40:1019
Prune 31:838, 889, 891
Quercus laurifolia 29:907
Non-parasitic
Arsenate of lead injury, apple 10:477, 479
Boron deficiency, beet 29:122

CANKER (Cont'd.)
Non parasitic (cont'd.)
Boron deficiency, sweet potato 36:166
Heat injury, bean 10:366
Illuminating gas injury, London plane 31:350
Lightning injury, cotton 33:153
2,4-D injury, cotton 38:642

CELL INCLUSIONS
Slime bodies, Robinia pseudoacacia 15:332
Viruses
Bean virus 2, 31:761
Onion yellow-dwarf, onion 37:1023
Pea virus 2, 31:761
Sandal spike disease, sandal 18:815, 816, 817; 23:195, 198
Tobacco mosaic, tobacco 24:332, 32:295
Present in normal plants 13:328
Non-parasitic, wheat 40:812

CHEMICAL INJURY
Acid fumes, Betula populifolia
Acid fumes, Lysimachia quadrifolia 12:364
Acid fumes, Prunus serotina 12:364
Acid fumes, Quercus bicolor 12:364
Acid fumes, Quercus velutina 12:364
Acid fumes, white pine 12:363
Actidione, pea 40:159
Alpha-naphthalene acetic acid, bean 36:510
Arsenic, grape 39:74
c, peach 15:322, 323, 325
Benzol, cabbage 37:906
Benzol, tobacco 30:216
Borax, sweet potato 38:478
Bordeaux mixture, ginseng 21:730, 733
Calcium chloride, Pinus sp. 12:368
Chloral hydrate, Pinus sp. 10:335
Cuprammonium fungicides, bean 7:266
Cuprammonium fungicides, Coleus 7:266
Cuprammonium fungicides, tomato
Cyanide, bean 20:422, 423, 426, 427, 429

CHEMICAL INJURY (Cont'd.)
Cyanide, cucumber 20:434
Cyanide, rose 20:6
Ethylene, Myosotis florideae 41:234
Fluorine, apricot 36:470
Fluorine, gladiolus 40:340
Fluorine, prune 36:31
Formaldehyde, oak 38:370
Formaldehyde, watermelon 15:481
Fungicide, apple 15:411, 415 (in color)
Illuminating gas, bean 36:510
Illuminating gas, London plane 31:350
Lanolin, sunflower 39:601
Nabam, sweet potato 33:478
Nicotine, chrysanthemum 30:94
Nicotine, soybean 34:296
Oil, gunjule 34:697, 698
Potassium cyanide, Ambrosia trifida 7:416
Potassium cyanide, apple 7:447
Seed treatment, corn 27:95; 38:33
Seed treatment, pea 36:201
Sulfur, clover 5:330, 221
Sulfur dioxide, tomato 22:267
Water blistering of wound dressing 21:730, 733
Zinc in germinator tray, tomato 27:867
2,4-D, cotton 38:639, 640, 643, 933
2,4-D, wheat 41:1013, 1015

CHLOROSIS
Albugo occidentalis, spinach 29:618
Alternaria solani (toxic principle of), tomato 41:1105
Cronartium ribicola, currant 29:
Fusarium vasinfectum, cotton 17:751, 752
Fusarium sp., celery 25:581
Gymnosporangium globosum, apple
Gymnosporangium juniperi-virginianae, apple 29:804
Peronospora tabacina, tobacco 29:30
Phytomonas medicaginis var. phaseolicola, bean 16:917, 918
Phytophthora erythroseptica, Xanthodeschia rehmanni 37:385
Puccinia graminis tritici, wheat 35:481
Sclerospora graminicola, Setaria italica 26:469

[illegible] wheat 29:489
[illegible]um citric mosaic, Molochevy
[illegible]um 51:1[illegible]
[illegible] [illegible]a pisi Manns
[illegible] bean 51:6[illegible]
[illegible]
[illegible] [illegible] 2[illegible] [illegible]
[illegible]
Alfalfa mosaic, alfalfa 24:240, 242, 248, 32:539, 36:143
Alfalfa mosaic, celery 32:536, 10:252
Alfalfa mosaic, clover 36:143
Alfalfa mosaic, cucumber 33:140, 40:962
Alfalfa mosaic, datura stramonium 40:982
Alfalfa mosaic, pepper 40:982
Alfalfa mosaic, tobacco 36:144
Alfalfa virus 2, alfalfa 27:859
Annulus orae var. phaseoli, bean 16:85
Apricot-plum mosaic, apricot 31:307
Apricot-plum mosaic, peach 31:[illegible]
Arabis mosaic, bean 34:327
Asparagus bean mosaic, asparagus bean 32:519, 520
Bean mosaic, bean 20:471, 474, 475; 24:92, 95; 40:849
Bean pod mottle, bean 40:1007
Bean virus 2, bean 27:839; 40:[illegible]
Bean virus 2, clover 40:890, [illegible]
Bean virus 2, pea 27:838; 40:[illegible], 697
Bean virus 4, bean 41:868
Broad bean mild mosaic, Melilotus alba 29:449
Broad bean mild mosaic, Vicia [illegible] 29:[illegible]
Broad bean mild mosaic, Vicia sativa 29:449
Lima bean mosaic, Lima bean 41:[illegible]
Yellow bean mosaic, glycine stem, bean 40:[illegible]
Blackberry dwarf, blackberry [illegible]
Blackberry mosaic, blackberry 38:828, 829
Black raspberry mosaic, raspberry 38:[illegible], 829
Black raspberry mosaic, black raspberry 39:681
Cabbage mosaic, 5 virus component, cabbage 41:1029
Canna mosaic, Canna spp. 38:[illegible]
Carnation mosaic, carnation 33:824, 825; 3[illegible]
Celery mosaic, celery 12:152, 154; 24:50, 51, 52, 696, 713
Celery mosaic, Commelina sp. 24:50, 51, 696
Celery mosaic, cucumber 24:715
Celery mosaic, Lilium longiflorum [illegible]
Celery mosaic, tobacco 24:713
Celery mosaic, zinnia 28:949
Celery virus 1, banana 36:1035
Cherry banded chlorosis, cherry 38:[illegible]
Cherry mild rugose mosaic, cherry 40:949, [illegible]
Cherry mild rusty mottle, cherry 38:634
Cherry yellows, Prunus mahaleb 30:450
Cineraria mosaic, Cineraria sp. [illegible]
Cineraria mosaic, lily 30:172
Citrus psorosis, citrus 24:663, 665
Citrus psorosis A, citrus 33:838
Citrus psorosis B, citrus 33:838, [illegible]
Citrus dirty pocket psorosis, citrus 33:838
Citrus crinkly leaf psorosis 33:856, 859
Citrus concave gum psorosis, citrus 33:836
Citrus oak leaf pattern psorosis 33:834
Clover mosaic, clover 11:147
Clover (red) vein mosaic, clover [illegible] 41:815, [illegible]6
Clover (red) vein mosaic, broad bean 41:[illegible]16
Clover (red) vein mosaic, pea 41:815
Coleus mosaic, Coleus sp. 35:825, [illegible]
Cowpea mosaic, cowpea 31:421
Cranberry false-blossom, Nicotiana tabacum 25:[illegible]
Crotalaria mosaic, Crotalaria incana 10:518
[illegible]

CHLOROSIS (Cont'd.)
Cucumber mosaic, Commelina communis 25:951
Cucumber mosaic, [illegible]
Cucumber mosaic, cowpea 24:757, 758
Cucumber mosaic, muskmelon 24:761
Cucumber mosaic, Lilium longiflorum 27:563
Cucumber mosaic, Nicotiana glauca 19:123
Cucumber mosaic, Nicotiana rustica 19:123
Cucumber mosaic, Nicotiana tabacum 16:150; 19:119; 31:204; 34:744, 747
Cucumber mosaic, pepper 19:123
Cucumber mosaic, Physalis pubescens 19:123
Cucumber mosaic, sugar-beet 23:455
Cucumber mosaic, spinach 20:104; 23:457, 460
Cucumber mosaic, zinnia 29:904
Cucumber mosaic, strain 6, Lilium longiflorum 27:563
Cucumber virus 1, cucumber 32:777
Cucumber virus 1, tobacco 23:908, 912; 30:173
Delphinium mosaic, delphinium 24:471
Delphinium mosaic, lettuce 24:476
Delphinium mosaic, Stellaria media 24:476
Delphinium mosaic, tobacco 24:474
Elm mosaic, elm 33:1197
Fig mosaic, fig 23:888, 890, 891; 31:562
Filaree red leaf, Erodium moschatum 41:229
Flavicauda ipomoeae, sweet potato [illegible]
Gladiolus mosaic, gladiolus 18:217
Grape mosaic, grape 35:941
(Pierce's disease of) grape, grape 41:924
(Pierce's disease of) grape, Hubam clover 41:925
Lima-bean mosaic, lima-bean 26:171
Lily coarse mottle, Easter lily 34:721
CHLOROSIS (Cont'd.)
Lily coarse mottle, Lilium formosanum 34:724
Lily coarse mottle, Lilium tigrinum 34:725
Lily coarse mottle, tulip 34:725
Lily latent virus, Easter lily 34:721
Lily latent virus, Lilium formosanum 34:724
Lily latent virus, Lilium tigrinum 34:725
Lily mosaic, Lilium harrisii 19:316
Lily mosaic, Lilium longiflorum [illegible]
Lily mosaic, passage strain, cucumber 27:565
Lily mosaic, passage strain, tobacco [illegible]
Lily mosaic, passage strain, zinnia 27:565
Lily virulent coarse mottle, Lilium formosanum 34:724
Lily virulent coarse mottle, Lilium tigrinum 34:725
Lily virulent coarse mottle, tulip 34:725
Lily virulent mottle, Easter lily 34:721, 739
Lily virulent mottle, Ornithogalum thyrsoides 34:719
Lily necrotic-fleck, lily 34:532, 540
Lovage mosaic, Ligusticum scoticum [illegible]
Marmor conspicuum, Euphorbia [illegible]
Marmor dipsacum, teasel 41:192
Marmor flavopunctum, bean 40:847, 849
Marmor flavopunctum, soybean 40:851
Marmor medicaginis var. capsici, pea 37:784
Marmor medicaginis var. capsici, pepper 37:784
Marmor medicaginis var. Ladino, clover 39:518
Marmor medicaginis var. Ladino, pepper 39:522
Marmor medicaginis var. Ladino, tobacco 39:522
Marmor medicaginis var. phaseoli, cucumber 41:969
Marmor medicaginis var. solani, pepper 37:784
Marmor melonis, muskmelon 37:810, 811

[illegible]

Cymbidium ringspot, cymbidium 39:[illegible]

Dahlia mosaic, dahlia 39:[illegible]

Dianthus necrosis, carnation 34:[illegible]

Euonymus mosaic, euonymus 34:[illegible]

Hyacinth tobacco vein clearing [illegible] hyacinth 40:[illegible]

Hyacinth tobacco vein clearing [illegible] tobacco 40:[illegible]

Narcissus mosaic, narcissus 40:[illegible]

Nicotiana glutinosa, mosaic, N. glutinosa 15:647

Nicotiana sylvestris acuba mosaic, N. sylvestris 24: 443,445

Orchid mosaic, Cymbidium sp. 32:403,405,432

Ornithogalum mosaic, O. thyrsoides 34:716

Papaya ring-spot, papaya 39: 199,201

Pea mottle, broad bean 32:109

Pea mottle, bean 32:109

Pea mottle, pea 32:105

Pea mottle, soybean 32:109

Pea mosaic, pea 15:732; 25:164

[illegible] pea 32:105

Pea mosaic, Vicia faba 25:165

Pea streak, clovers 69:841

Pea stunt, broad bean 41:815

Pea stunt, clovers 41:815,816

Pea stunt, pea 41:[illegible]

Pea wilt, bean 32:109

Pea virus 1, pea 2:[illegible]

Pea virus 2, bean 27:[illegible]

Pea virus 2, clover 27:[illegible]

Pea virus 2, pea 27:[illegible]

Pea virus 2, potato tuber 27:[illegible]

Pea virus 2, pea 27:[illegible]

Pea virus 2, pea 27:[illegible]

Pea virus 2, pea 27:[illegible]

Pea virus 3, broad bean [illegible]

Pea virus 3, clover [illegible]

Pea virus 3, pea 2:[illegible]

Pea virus 3, pea [illegible]

Pea wilt blight, pea 32:[illegible]

Peach bunchy [illegible] peach 32:[illegible]

Peach [illegible] prune 31:[illegible]

Peach rosette, peach 41:[illegible]

Peach tatter leaf, cherry 26:76

Peach tatter leaf, peach 56:[illegible]

Peach wart, cherry 35:609

Petunia mosaic, Nicotiana glutinosa 16:180

Petunia mosaic, Physalis sp. 16:150

Phenax mosaic, P. Sonneratii 38 [illegible] 335,336

Physalis pubescens mosaic, P. heterophylla 15:744

Physalis pubescens mosaic, P. pubescens 15:744

Physalis pubescens mosaic, P. subglabrata 15:744

Pittosporum chlorosis, P. Tobira [illegible]

Plum chlorosis, plum 31:1005

Plum line pattern, cherry 36:997

Plum line-pattern, peach 35:995

Plum line-pattern, plum 35:995 995

Potato acuba mosaic, potato 16:936

Potato acuba mosaic tobacco 29:919

Potato crinkle mosaic, potato 26:603

Potato crinkle A, potato 26:605

Potato latent virus pepper 17:770, 776

Potato mild mosaic, potato 26:605

Potato mosaic, potato 12:138, 16: [illegible]

Potato paracrinkle, potato 26:603, 29:30

Potato rugose mosaic, potato 28: 382; 29:52

Potato rugose mosaic, tobacco 23 [illegible]

Potato streak, potato 29:982

Potato tuber blotch, tobacco 28:919

Potato virus A plus virus X, potato 28:47

Potato yellow-dwarf Nicotiana rustica 41:428

Prune dwarf, cherry 34:1045

Prune dwarf, peach 32:746,747

Prune dwarf, plum 34:1042

Prune dwarf, prune 34:1045

Rape mosaic, rape 30:309

Red clover mosaic, red clover 29:1064

Red clover mosaic, red clover 36 [illegible]

Red clover mosaic, Vicia faba 27: 1053

Red clover vein mosaic, red clover 27:1[illegible]
Red currant mosaic, red currant 29:370
Rose mosaic, rose 22:57,59,60, 62,64
Soja virus 1, soybean 38:7[illegible]
Spotted wilt, Emilia sonchifolia 30:304
Spotted wilt, tomato 30:302
Squash mosaic, squash 34:406, 407
Strawberry crinkle, strawberry 22:711; 23:739
Sugar-beet curly top, beet 7:281
Sugar-beet mosaic, sugar-beet 11:352,353,354; 23:452
Sugar-beet mosaic, Melilotus indica 38:671
Sugar-beet mosaic, spinach 23:452
Sugar-beet yellow net, sugar-beet 38:430
Sugar-beet yellow net, Swiss chard 38:430
Sugarcane mosaic, sugarcane [illegible]
Sweet clover mosaic, sweet clover 24:250
Sweet clover mosaic, petunia 24:253
Sweet pea mosaic, sweet pea 15:772
Sweet potato mosaic, sweet potato 19:[illegible]
Tigridia mosaic, T. pavonia 34:594
Tobacco broken ring-spot, bean 34:527
Tobacco etch, tobacco 41:1125
Tobacco mosaic, Browallia speciosa 28:385
Tobacco mosaic, Capsicum frutescens 24:988
Tobacco mosaic, Fagopyrum esculentum 24:319
Tobacco mosaic, Nicotiana glauca 16:150
Tobacco mosaic, Nicotiana glutinosa 16:150
Tobacco mosaic, petunia 6: 334
Tobacco mosaic, Phacelia whitlavia 24:319
Tobacco mosaic, Plantago [illegible]
Tobacco mosaic, pokeweed 8:[illegible]
Tobacco mosaic, Physalis sp. [illegible]
Tobacco mosaic, tobacco 11:456; 16:150; 19:119; 23:331; 24: 847, 859, 860; 28:914; 30: 540
Tobacco mosaic, tomato 30:540
Tobacco mosaic, rib-grass strain, tobacco 31:1090
Tobacco mosaic, zinnia 24:319
Tobacco mottle, tobacco 23:324, 332
Tobacco ring-spot, cucumber 34: 73
Tobacco ring-spot, spinach 23: 457, 460
Tobacco ring-spot, tobacco 34: 69
Tobacco spot necrosis, tobacco 23:324
Tobacco streak, sweet clover 40:517
Tobacco severe etch, Nicotiana glutinosa 36:645
Tobacco veinbanding, tobacco 23:324
Tobacco yellow mosaic, Nicotiana rustica 26:900
Tobacco yellow mosaic, Nicotiana sylvestris 23:967
Tobacco yellow mosaic, tobacco 21:209; 23:967, 971; 26:900
Tobacco yellow mosaic, tomato 23:967; 26:900
Tomato rosette, tobacco 41:1094
Tomato spotted wilt, Datura stramonium 30:294
Tomato spotted wilt, pepper 30: 292
Tulip virus 1, Lilium formosanum 34:724
Tulip virus 1, Lilium tigrinum 34:725
Tulip virus 1, Easter lily 34: 725
Tulip virus 1, tulip 34:725
Tulip virus 2, Lilium formosanum 34:724
Tulip virus 2, Lilium tigrinum 34:725
Tulip virus 2, Easter lily 34: 725
Tulip virus 2, tulip 34:725
Watermelon mosaic, watermelon 23:742, 743

White clover necrosis, tobacco 35:
White clover necrosis, white clover
White clover virus 1, bean 27:859
White clover virus 1, pea 27:838
Wilt, parasitic
Antirrhinum, feeding by Myzus persicae 32:94
Bean, genetic 16:732; 40:849
Bean, alpha-naphthalene acetic acid 30:510
Beet, copper deficiency 26:1110
Beet y, unknown cause 5
Cantaloupe, guttation cell injury 34:
Corn, magnesium deficiency 22:
Corn, manganese deficiency 22:36
Corn, sodium excess 22:36
Lily, feeding by aphids 38:850
Olive, boron deficiency 33:931
Prunus cerasifera, genetic 35:48
Soybean, nicotine fumigation 34:
Strawberry, genetic 23:657, 658
Rose, iron deficiency 22:62
Sugarcane, cold injury 16:886, 887, 889
Sugarcane, unknown cause 7:481, 482
Tobacco, freezing 25:1069, 1076
Tobacco, sulphur deficiency (?) 25:13
Tobacco, watercaking 29:887, 888
Tomato, unknown cause 8:536

Cytosporina ribesia 30:408
Dothiorella aromatica 27:709, 715
Hysterographium fraxini 39:752
Pestalozzia funerea 4:383, 384
Phyllosticta antirrhini 9:321

Ophiobolus graminis 36:
Sphaeronema fimbriatum 30:
Stagonospora curtisii 30:
Stagonospora tainanensis 33:
Stemphylium botryosum 33:
Stemphylium solani 33:
Trematosphaeria pertusa 33:
Trematosphaeria tainanensis 33:
Venturia inaequalis 33:
Venturia pomi 33:
Wojnowicia graminis 33:

Fusarium oxysporum f. lycopersici

From and through cells, Heterosporium tropaeoli 40:
From stomata, Alternaria zinniae 33:
From stomata, Cercospora festucae 40:1025
From stomata, Ramularia cyclaminicola 40:1031
From stomata, Ramulispora sorghi 36:193, 194

CONIDIOPHORES BEARING CONIDIA
Acrostalagmus zeae 36:214
Alternaria citri var. cerasi 7:195
Alternaria sp. 26:535, 536, 539; 37:610
Anastomospora macrospora 34:
Aspergillus sclerotiorum 23:
Aspergillus sp. 6:
Asterocystis radicis 20:235, 235, 237, 678, 679
Blakeslee trispora 17:
Botrytis cinerea 3:174; 6:
Botrytis elliptica 38:752
Calonectria graminicola 3:242
Cephalosporium cinnamomeum 30:971
Cephalosporium fici 38:712
Cephalosporium gregatum 38:794
Cephalosporium sp. 27:731
Cercospora cerotae 33:116
Cercospora festucae 40:1025
Cercospora kikuchii 41:309
Chalaropsis thielavioides 30:
Choanephora cucurbitarum 29:
Cladosporium fulvum 40:1031
Cladosporium paeoniae 27:173, 175, 199
Cladosporium sp. 4:190
Clonostachys araucaria var. rosea 9:40
Cunninghamella mainecksella 31:1073
Cylindrocladium scoparium 7:
Dactylella spermatophaga 28:83, 95, 96
Erysiphe cichoraceorum 30:
Erysiphe graminis hordei 20:235, 236, 237
Fusarium oxysporum f. delphinii 39:915
Geotrichum sp. 30:532
Helicocladium arxeum 38: 447, 449
Helicosporium corynesporum 36:

CONIDIOPHORES BEARING CONIDIA (Cont'd.)
Helminthosporium erythrospilum 25: 351, 359
[illegible]sporium gramineum 36:1050
[illegible]inthosporium vignae 35:826
[illegible]sporium phlei 9:579
[illegible]sporium tropaeoli 40:556
[illegible]myces ipomoeae 3:242
[illegible]cylon pruinatum 28:517
[illegible]riopsis griseola 7:347
[illegible]sphaerella aquilata [illegible]
[illegible]sphaerella fragariae [illegible]
[illegible]tria discophora 3:242
[illegible]tria galligena 3:242
Oidium tingitanium 5:[illegible]
[illegible] 3:tri-[illegible]
Ophiobolus sp. 24:971
Ophiostoma narcissi 40:494, 495
Ormathodium fici 38:713
Oulinia anaiana 30:[illegible]
Patellina fragariae 6:[illegible]
Penicillium oxalicum 9:37
Peronospora nicotianae 34:511, 513; 35:517
Peronospora parasitica 16:333; 35: 986
Peronospora tabacina 35:517, 11:61; 39:507, 508
Phytophthora cactorum 19:[illegible]
Phytophthora palmivora 21:945, 947
Phytophthora parasitica 21:945, 947
Podosporiella verticillata 5:[illegible]
Pythium spp. 13:[illegible]
Ramularia camelia 5:[illegible]
Ramularia cyclaminicola 40:1030, 1031
Ramularia destructans 8:567
Ramularia macrospora 5:242
Ramularia magnusiana 3:242
Ramularia olida 3:242
Ramularia panacicola 8:567
Ramulispora sorghi 36:193, 194
Rhizidiocystis ananasi 19:[illegible], [illegible], 375, 376
Rhizopus nigricans 6:[illegible]
Rosellinia sp. 4:[illegible]
Sclerospora graminicola 22:[illegible]; 26:463
Sclerospora graminicola var. [illegible]-pogonis-sorghi [illegible]
Sclerospora noblei [illegible]
Sclerospora sorghi 32:334
Sclerotinia ricini 9:[illegible]
Sphaeloma fawcettii scabiosae [illegible]

CONIDIOPHORES BEARING CONIDIA (Cont'd.)
Thielavia basicola 2:[illegible]
Torula marginata 35:95
Trichoderma lignorum 1:[illegible]; 24:[illegible]
Trichosporia fructigena 30:[illegible]
Trichothecium roseum 41:637, 638
Trinacrium subtile 28:[illegible]
Tuberculariа ulmea 37:244

COLOR BREAKING
Aster yellows virus, Phlox drummondii 33:742
Carnation mosaic virus, carnation 33:825
Cucumber virus 1, tulip 30:173
Lily coarse mottle virus (CM), tulip 34:722
Lily latent virus, tulip 34:722
Lily virulent mottle virus (VCM), 34:722
Orchid mosaic virus, Cattleya sp. 39:1037
Tulip mosaic virus, tulip 30:173
Tulip virus 1, tulip 34:722
Tulip virus 2, tulip 34:722

CONTROL OF DISEASE
Actinomyces scabies, seed treatment 8:458, 460, 461, 462, 463
Actinomyces scabies, use of clean seed 8:459
Agrobacterium tumefaciens, aureomycin 41:956
Alternaria sp. (in culture), ultraviolet light 36:105
Bacterium solanacearum, rotation 34:877
Bacterium tumefaciens, acenaphthene 31:28
Bacterium tumefaciens, a-methyl naphthalene 31:28
Bacterium tumefaciens, colchicine 29:225, 227
Bacterium tumefaciens, methyl salicylate 31:32
Bacterium tumefaciens, n-heptyl alcohol 31:28
Bacterium tumefaciens, penicillin [illegible]
Botrytis sp., by gouging-out infected stem tissue and filling cavity with bordeaux paste 38:226
Cerastostomella fimbriata, borax 38: 477
Cladosporium effusum, fungicides 38: 9[illegible]

CONTROL OF DISEASE (Cont'd.)
Peronospora tabacina, benzol 29:108, 194
Peronospora tabacina, fungicides 37:125, 132, 133
Peronospora tabacina, paradichlorobenzene 29:364, 986, 988, 29:218
Phymatotrichum omnivorum, sulphur and heat 35:1207
Phytophthora infestans, fungicides 37:620
Phytophthora parasitica, cultural practices 32:531, 532
Phytophthora richardiae, hot water 34:930
Plasmodiophora brassicae, fungicides 34:188, 189
Pseudoperonospora humuli, fungicides 27:940
Puccinia graminis tritici, fungicides 38:177, 178, 179
Puccinia graminis tritici, sulphur 19:641
Pythium debaryanum, seed treatment 34:494; 46:189
Pythium ultimum, hot water 33:736
Pythium ultimum, seed treatment 37:695
Pythium spp., chloropicrin 32:1035
Pythium spp., seed treatment 39:78, 80, 82; 41:748, 847
Rhizoctonia solani, seed treatment 37:695
Rhizopus nigricans, seed treatment 27:735
Sclerotinia fructicola, fungicides 38:686
Sclerotium rolfsii, chloropicrin 39:275
Septoria lycopersici, fungicides 9:558
Tylenchus dipsaci, hot water 11
Ustilago spp., seed treatment 15
Viruses
Cranberry false blossom, heat 35:814, 816
Citrus necrosis, bark removal 34:24
Miscellaneous
Damping-off pathogens, seed treatment 19:1131, 1132; 26:1095; 27:576, 583
Treating cotton seed, sulphuric acid, followed by seed treatment 32:86

...OL OF DISEASE (Cont'd.)
...ise, cont'd.)
Nut-grass, chloropicrin 24:1343
Soil-borne fungi, ethyl mercury iodide 30:[illegible]
Soil-borne fungi, chloropicrin 26:[illegible]

...
...testomella [illegible] 27:[illegible], 926, 927
Fusarium sp., 29:896
Sporocybe azaleae 29:522; 30:500, 510

CRACKING
Bacillus carotovorus, potato 27:108
...dera surinoi, sweet potato 17:554
...spora corticia, blackberry 32:1069
...lenchus brady, yam 27:[illegible]
Viruses
Citrus blind-pocket psorosis, citrus 33:[illegible]
Citrus concave-gum psorosis 33:852
Potato yellow dwarf 12:132
Non-parasitic
Chrysanthemum, floral stem 9:534
Kumquat, excessive water intake 29:214
Orange 6:47
Quercus laurifolia 29:907
Tomato, cuticle 37:144
Tomato, fruit 30:[illegible]

...KING-SPLITTING OF LEAF ALONG VASCULAR BUNDLES
...bellina cerealis, barley 24:947
...bellina cerealis, wheat 24:947
...erospora sorghi, sorghum 32:[illegible]

CRACKING-SPLITTING OF STEMS
Fusarium cubense, banana 9:390

CURL
Marmor malicaginis var. ladino, soybean 39:522
Minuor ruborum, raspberry 33:137
Morivum tabaci var. plantaginis, tobacco 33:211
Oidium tingitanium, citrus 5:196

CURL (con't.)
Taphrina deformans, peach 25:55; 28:176
Uromyces hobsoni, Jasmium grandiflorum 29:786
Viruses
Alfalfa mosaic, alfalfa 24:240
Alfalfa mosaic, potato 40:974,976
Asparagus bean virus, asparagus bean 32:520
Celery virus, 12:152, 154
Cucumber mosaic, spinach 23:457
Delphinium virus, tomato 24:475
Delphinium virus, plus tobacco mosaic, tomato 24:477
Filaree red leaf, Geranium dissectum 41:255
Lima bean mosaic, lima bean 41:232
Potato virus, potato 12:138
Potato green dwarf, potato 36:673, 674
Potato late break, potato 39:464, 465
Potato leaf roll, Physalis angulata 38:506
Potato leaf roll, potato 8:509, 510, 511, 514, 515, 516, 518, 519, 521, 522, 523, 524, 525, 526; 17:560
Potato leaf rolling mosaic, potato 29:50
Raspberry mild streak, black raspberry 39:381
Strawberry leaf roll, strawberry 32:632
Sugar-beet curly top, bean 30:731
Sugar-beet curly top, beet 5:104, 105, 336, 345
Sweet clover virus, sweet clover 24:250
Tobacco leaf-curl, Datura stramonium 38:367
Tobacco leaf-curl, potato 38:367
Tobacco leaf-curl, tobacco 38:366
Tobacco leaf-curl, tomato 38:365, 367
Tobacco mosaic, leaf shrivelling strain, tomato 32:987, 988
Tobacco ring spot, tobacco 31:524
Tomato spotted-wilt, Cinerea sp. 34:945
Tulip virus, Lilium formosanum 30:253

...d)

...

...

Anthracnose feeding by Myzus ...
...
Aster 6:121
Lily, feeding by aphids 38:150
Pear, eclinata, drought ...
...
potato, red spider injury ...
...
sugar beet 75:911, 912, 913
tomato 11:381

...S
...ansoniana rostoviensis 41:889)

...ERICAL STYLES OF PATHOGEN
...etrytis cinerea 28:958
...ercosporella fimbriata 15:422
...plodia zeae 29:68, 69, 70
...scochyta app. 25:427, 428
...lenore in Aesculus 28:791
...ngospora acaciae 6:21
...ymenula (Ascochyta) helicoidea 25:461, 493, 494
...olminthosporium graminum 25:285, 286
...olminthosporium rostratum 40:401
...olminthosporium sacchari 40:95
...40:9...
...elanopsichium etiousinis 38:482
...eridermium sp. 27:49
...hyllosticta omnivorum 25:587, 589, 29:499, 501
...hysalospora obtusa 41:461
...seudopeziza ribis 26:150
...uccinia graminis 21:1017
...uccinia malvacearum 23:574, 576, 578, 579
...uccinia sorghi 33:924
...hizoctonia microsclerotia 7:110
...hizoctonia solani 29:766
...clerotium cepivorum 30:169
...eptoria lycopersici 25:791, 793, 797
...phaerulina rubi 33:992
...aphrina deformans 25:54, 57, 66
...illetia caries (dwarf bunt strain) 39:914
...illetia tritici 25:1095, 1097
...rocystis cepulae 39:339
...rocystis occulta 24:876, 878, 884, 30:931

...AL STYLES OF PATHOGEN (Host ...)
...Dreyfusia hetzeni 29:784, 785, 786
...Ustilago cruciferarum 33:1124, 1126
...Ustilago striiformis f. poae-pratensis 36:877, 879, 882, 885
...Ustilago zeae 24:1015, 1017; 33:952

...DAMPING-OFF
...Alternaria brassicae, cabbage 35:1004
...Aphanomyces cochlioides, sugar-beet ...
...Fusarium avenaceum, Abies concolor 35:431
...Fusarium avenaceum, Pinus banksiana 35:431
...Fusarium avenaceum, Pinus nigra austriaca 35:431
...Fusarium avenaceum, Pinus ponderosa 35:432
...Fusarium avenaceum, Pinus sylvestris 35:431
...Fusarium avenaceum, Pseudotsuga taxifolia 35:431
...Fusarium avenaceum, Pinus resinosa 35:430, 431
...Fusarium chrysophaeron, onion 19:...
...Fusarium equiseti, Abies concolor 35:431
...Fusarium equiseti, Picea pungens 35:431
...Fusarium equiseti, Pinus banksiana ...
...Fusarium equiseti, Pinus ponderosa 35:431
...Fusarium equiseti, Pinus resinosa 35:431
...Fusarium equiseti, Pinus sylvestris 35:431
...Fusarium equiseti, Pseudotsuga taxifolia 35:431
...Fusarium martii, mushrooms 27:90
...Fusarium moniliforme, Pinus str... 4:376
...Fusarium niveum, muskmelon 23:...
...Fusarium niveum, watermelon ...
...Fusarium orthoceras, Abies co... 35:431
...Fusarium orthoceras, Pinus banksiana ...
...Fusarium orthoceras, Pinus nigra austriaca 35:431
...Fusarium orthoceras, Pinus ponderosa 35:431
...Fusarium orthoceras, Pinus resinosa ...
...Fusarium orthoceras, Pinus sylvestris 35:43...

DAMPING-OFF (Contd.)
Fusarium orthoceras, [illegible]
tenifolia 35:431
Fusarium orthoceras var. longius, Pinus resinosa 35:428
Fusarium oxysporum, mushrooms 27: 88, 90
Fusarium oxysporum, Pinus resinosa 35:428
Fusarium reticulatum, Abies concolor 35:431
Fusarium reticulatum, Pinus banksiana 35:431
Fusarium reticulatum, Pinus nigra austriaca 35:431
Fusarium reticulatum, Pinus ponderosa 35:431
Fusarium reticulatum, Pinus resinosa 35:428, 431
Fusarium reticulatum, Pinus sylvestris 35:431
Fusarium reticulatum, Pseudotsuga tenifolia 35:431
Fusarium sp., Pinus strobus 4:78, 88
Glomerella gossypii, cotton 30:1052
Penicillium sp., soybean 35:145
Phoma sp. sugar-beet 17:268, 269, 270, 271, 275, 279, 284
Phyllosticta antirrhini, snapdragon 9:316, 317
Pythium debaryanum, sugar-beet 28: 450, 451; 34:494
Pythium ultimum, orchid 39:1061
Pythium sp., alfalfa 25:422
Pythium sp., cucumber 27:576
Pythium sp., pea 27:583
Pythium sp., spinach 27:577
Pythium sp., sugar-beet 17:268, 269, 270, 271
Rhizoctonia solani, alfalfa 39:929
Rhizoctonia solani, pepper 37:915
Rhizoctonia sp., cucumber 27:576
Rhizoctonia sp., Lupinus angustifolius 36:480
Rhizoctonia sp., pea 27:583
Rhizoctonia sp., spinach 27:577
Rhizoctonia sp., sugar-beet 17:268, 269, 270, 271, 275, 279, 284
Sclerotium bataticola, Abies concolor 35:431
Sclerotium bataticola, Picea pungens 35:431
Sclerotium bataticola, Pinus banksiana 35:431
DAMPING-OFF (Contd.)
Sclerotium bataticola, Pinus nigra austriaca 35:431
Sclerotium bataticola, Pinus ponderosa 35:431
Sclerotium bataticola, Pinus resinosa 35:431
Sclerotium bataticola, Pinus sylvestris 35:431

DIEBACK
Alternaria ricini, castor bean 35:250
Chilonectria cucurbitula, jack pine 37:759
Diplodia theobromae, guayule 36: 566
Endoconidiophora virescens, maple 34:1071
Erwinia carnegieana, cactus 32:304
Melanconis juglandis, butternut 13:434
Phomopsis pseudotsugae, Pseudotsuga douglasii 19:980
Phytophthora cinnamomi, chestnut 35:164
Phytophthora parasitica, Cinchona pubescens 35:139
Phytophthora parasitica, papaya 32:315
Tubercularia ulmea, Ulmus pumila 37:244
Verticillium albo-atrum, pepper 29:360
Verticillium dahliae, maple 16:612
Viruses
Cherry yellows, peach 38:512
Peach-wart, cherry 35:608
Non-parasitic
Apple, boron deficiency 30:149
Citrus 6:42, 45
Oak 39:716
Olive, boron deficiency 33:936
Poplar 10:144
Prune, copper deficiency 18: 449, 451, 454

DISEASE MEASUREMENT
Actinomyces scabies 28:881
Alternaria solani 33:703; 35:26; 36:1013
Colletotrichum lindemuthianum 8: 614
Corticium solani 35:387
Erysiphe cichoracearum 32:988
Fusarium bulbigenum var. lycopersici 29:950

[illegible] (cont'd)
[illegible] 24:63
[illegible] 24:62
[illegible]thosporium turcicum 56:661
Heterodera marioni 31:1100, 1105
32:627; 34:956, 961; 36:342
Pythomonas malvacearum 34:236
Pythomonas tumefaciens (filtrate
from) 37:305
Pseudomonas medicaginis var. pha-
seolicola 40:606
Pseudoperonospora humuli 32:383
Puccinia graminis tritici 18:20,
[illegible]
Puccinia triticina 10:166
Pycnonotus aeolani 34:1059
Pythium phaseoli typica 27:1092
Rhizobium trifolii 40:48
Rots
Tobacco mosaic 33:1046; 41:501
Saprolegnia parasitica
Filtrate from culture, Phyto-
monas tumefaciens 37:305
Internal browning, potato 40:
[illegible]
Watersoaking, tobacco 35:757
[illegible]
Scolecotrichum
Bacterium trachelphilus, cucum-
ber 23:997
Bacterium tumefaciens, plum 6:
194
[illegible]
6:194
Phytomonas stewartii, corn 27:
[illegible]
Xanthomonas malvacearum, cotton
[illegible]
Xanthomonas phaseoli, bean 38:
703
Sclerotium
Actinomyces scabies, potato 29:
[illegible], 29:205, 206, 208
Alternaria longipes, tobacco
21:547
Cercospora apii, celery 36:981
Cercospora oryzae, rice 30:[illegible]44,
[illegible]:92
Cheiroseia thalaetoides, rose
36:250
Cladosporium cucumerinum, cucum-
ber 40:1027
Dendrium fulvum, tomato 32:
[illegible]
[illegible] (cont'd)
[illegible] (cont'd)
Colletotrichum lindemuthianum,
bean 1:194; 8:164, 37:405
Colletotrichum lini, flax 35:
690
Cronartium ribicola, currant 12:
300; 28:353, 869; 29:51
Diplodia zeae, corn 28:301, 502-
503
Endothia parasitica, chestnut
[illegible]
Erysiphe cichoracearum, canta-
loupe 32:997
Erysiphe cichoracearum, cucum-
ber 30:1028
Erysiphe graminis hordei, barley
20:235; 27:54
Fusarium bulbigenum var. lyco-
persici, tomato 29:949
Fusarium conglutinans var.
callistephi, aster 25:740,
742; 27:738
Fusarium conglutinans var.
majus, aster 25:740, 742
Fusarium lateritium var. fructi-
genum, aster 25:742
Fusarium lycopersici, tomato
8:10; 14:196
Fusarium oxysporum, f. pisi,
race 2, pea 39:774
Fusarium oxysporum, f. trachei-
philum, race 1, cowpea 10:
187
Fusarium oxysporum, f. [illegible],
aster 25:740, 742
Fusarium udum var. crotalariae,
Crotalaria intermedia 41:
716
Fusarium udum var. crotalariae,
Crotalaria lanceolata 41:716
Fusarium vasinfectum, cotton
28:209
Ginterella saubinetti, corn 21:
623, 678
Glomerella gossypii, cotton 28:
293
Gymnosporangium juniperi-virgini-
anae, Juniperus virginiana
30:877
Helminthosporium sacchari, Le-
nisetum purpureum 28:439,
440, 441
Helminthosporium sativum, barley
41:669

DISEASE RESISTANCE (Cont'd.)
Fungi (cont'd.)
Helminthosporium sativum, wheat 15:787, 792
Helminthosporium victoriae, oat 37:792
Melampsora lini, flax 32:660, 661
Melampsora lini var. liniperda, flax 20:718, 719
Musivum tabaci var. plantaginis, tobacco 33:213
Nigrospora sp., corn 35:561
Peridermium sp., Pinus sylvestris 25:825
Peronospora manchurica, soybean 36:1058
Peronospora spinaciae, spinach 40:67
Phymatotrichum omnivorum, Malvaviscus conzattii 22:456
Phytophthora infestans, potato 27:1063, 1066; 30:737, 743, 747; 33:1105
Phytomonas medicaginis var. phaseolicola, bean 32:248, 250, 251
Phytomonas stewartii, corn 27:1075, 1079
Phytomonas tabaci, tobacco 35:764
Pseudomonas medicaginis var. phaseolicola, bean 40:606
Puccinia anomala, barley 20:876, 877, 878
Puccinia antirrhini, snapdragon 25:981; 27:114
Puccinia coronata, Festuca elatior 37:61
Puccinia coronata, oat 9:314; 26:227; 27:412, 791
Puccinia coronata avenae, oat 28:900
Puccinia graminis avenae, race 5, oat 32:1089
Puccinia graminis, oat 9:314; 26:227; 27:412, 791
Puccinia graminis phlei-pratensae, timothy 14:367
Puccinia graminis tritici, barley 9:88
Puccinia graminis tritici, wheat 9:88; 15:387; 16:827; 17:595; 18:123, 632, 633, 634, 635, 637, 644; 33:887, 888, 894
DISEASE RESISTANCE (Cont'd.)
Fungi (cont'd.)
Puccinia graminis tritici, f. sp., wheat 22:497, 500, 501, 513, 514, 515, 519
Puccinia graminis tritici-compacti, wheat 8:145, 146; 9:88
Puccinia psidii, Eugenia jambos 28:158
Puccinia sorghi, corn 17:817
Puccinia triticina, barley 26:238
Puccinia triticina, wheat 10:168, 169; 16:120
Septoria lycopersici, tomato 35:18
Streptomyces scabies, potato 40:474
Thielavia basicola, tobacco 6:175, 176, 178
Typhula itoana, grasses 31:941
Uromyces striatus, alfalfa 32:1052, 1053
Ustilago avenae race D, oat 36:441
Verticillium albo-atrum, boysenberry 40:1108
Verticillium albo-atrum, cotton 40:499, 508
Verticillium albo-atrum, tomato 41:987
Insects
Mealy bug wilt, pineapple 27:337
Viruses
Cabbage mosaic, cabbage 41:1087
Cucumber virus 1, cucumber 32:777, 778, 779
Lettuce brown blight, lettuce -- 30:61, 62
Musivum tabaci var. plantaginis, tobacco 33:213
Sugar-beet curly top, sugar-beet 22:207; 27:775; 36:39
Sugar-beet curly top, bean 22:208
Tobacco etch, tobacco 41:1125
Tobacco mosaic, Nicotiana spp. 37:830
Tobacco mosaic, tobacco 28:287; 31:1141
Tobacco mosaic, tomato 27:82
Tobacco mosaic, mild strain, tobacco 41:598, 601, 605

DISEASE RESISTANCE (Cont'd.)
Virus (cont'd.)
Tobacco yellow-mosaic, mutant [illegible] tobacco 32:535
Non-parasitic
Waterlogging, tobacco 35:760

DISEASE RESISTANCE (Development of New Physiologic Strains of Pathogen)
Sphaerotheca sorghi 28:557

DISEASE RESISTANCE, Histological Demonstration Of
Hastercosporium carpophilum, Prunus amygdalus 36:630
Spinartium ribicola, white pine [illegible]
Erysiphe martii, Trifolium pratense 36:328
Heterodera radicicola, Lycopersicon pruvianum 40:217
Peronospora parasitica brassicae, race 2, crucifers 39:542
Puccinia graminis, wheat 36:528
Puccinia purpurea, sorghum 21:537, 541
Puccinia sorghi, corn 17:825
Stereum purpureum, beech 36:631
Tilletia tritici, wheat 20:644

DISEASE RESISTANCE, Increase in [illegible]
By fertilization, Peronospora tabacina on tobacco 26:774

DISEASE RESISTANCE, Increase in Virulence of Pathogen
By serial passage through "resistant" hosts
Phytomonas stewartii, corn 27:1075, 1079
Phytomonas stewartii, Pearl millet 27:1084
Phytomonas stewartii, Reed canary grass 27:1085

DISEASE RESISTANCE, Inheritance Of
Tobacco mosaic virus, distorting strain, tobacco 28:555
Taxonomic relationships of plants susceptible to infection by tobacco etch and tobacco mosaic viruses 36:695

DISEASE RESISTANCE, Loss of Resistance Of a Host
Caused by prior infection by another fungus
(Erysiphe graminis and Puccinia triticina), wheat 24:1046
Effect of fungus infection on resistance to cold by plant
Puccinia coronata, oat 29:769, 771, 772
Puccinia graminis avenae, oat 29:773

DISEASE RESISTANCE, Recovery
Fungi
Erysiphe cichoraceorum, phlox 32:415, 416
Helminthosporium maydis, race I, corn 31:516
Phytophthora infestans, potato 30:746
Insects
Mealy bug, wilt, pineapple 35:310
Viruses
Cherry ring-spot, cherry 39:37, 40
Peach yellows (heat cure), peach 26:812, 813, 815
Sugar-beet curly top, tobacco 29:746, 747
Sugar-beet curly top, tomato 26:552; 34:121
Tobacco ring-spot, tobacco 26:506
Non-parasitic
Sugar-beet tip burn 35:93

DISEASE RESISTANCE, Resistance to One Pathogen Conferred On Plant by Previous Infection With Same or Another Pathogen (Virus)
Hawaiian Commelina mosaic virus "protects" against cucumber mosaic, [illegible]
Doolittle's cucumber-mosaic virus "protects" against strain 6 of cucumber-mosaic, zinnia 38:65
[illegible]
"protects" against strain 6 of cucumber mosaic, zinnia 25:778
Hortensia-mosaic virus "protects" against strain 6 of cucumber-mosaic, zinnia 38:65
"Passage" strain of lily-mosaic virus "protects" against strain 6

DISEASE RESISTANCE, Resistance to One Pathogen Conferred On Plant by Previous Infection With Same Or Another Pathogen (Virus) (Cont'd.)
of cucumber-mosaic, zinnia 27:566
Marmor secretum "protects" against reinfection by same virus, tobacco 34:83
Potato calico virus "protects" against alfalfa-mosaic, tobacco 30:446
"Recovery" from curly-top of sugar-beet virus "protects" against reinfection by same tobacco 29:748
Effect of grafting tobacco, diseased with curly-top of sugar-beet virus, into healthy tobacco 30:678
Tobacco acuba mosaic virus "protects" against tobacco mosaic strain 302A, zinnia 25:786
Tobacco-etch virus, mild strain, "protects" against severe-etch strain of this virus, Physalis peruviana 32:1061
Tobacco mosaic virus, type strain, "protects" against tomato rosette strain of same virus, Nicotiana sylvestris 41:1094
Tobacco mosaic virus, rib-grass strain, "protects" against typm strain of same virus, tobacco 31:1090
Tobacco mosaic virus "protects" against acuba mosaic, tobacco 24:445, 447, 449, 455, 457, 460
Tobacco ring-spot virus No 1 "protects" against green ring-spot virus, tobacco 26:669, 670, 671

DISEASE RESISTANCE, Resistance to One Pathogen Not Conferred to Plant by Previous Infection With Another or Same Pathogen (Virus).
Cucumber mosaic virus does not "protect" against infection by potato virus Y, Physalis floridana 40:446, 448
Porter's cucumber mosaic virus does not "protect" against infection by tobacco mosaic virus, strain 302A, zinnia 25:787

DISEASE RESISTANCE, Resistance to One Pathogen Not Conferred to Plant by Previous Infection With Another or Same Pathogen (Virus). (Cont'd.)
Tobacco ring-spot virus No. 1 does not "protect" against ring-spot virus No. 2, tobacco 26: 669, 670, 671
Tobacco severe-etch virus does not "protect" against cucumber mosaic virus, strain No. 6, zinnia 25:779

DISSEMINATION OF PATHOGEN (Charts)
Of Bacteria
Bacterium lachrymans 8:230
Phytomonas solanacearum 34:447
Xanthomonas malvacearum 39:89
Of Fungi
Ceratostomella ulmi 34:1027; 41:147
Chalara quercina 39:428
Mathematical curves relating to dissemination of air-borne spores 36:420, 422, 423, 424, 429
Of Insect
Mealy bug, pineapple 35:314
Of Viruses
Southern celery mosaic 25:291, 294, 295, 296, 297
Cherry yellows 38:781
Citrus psorosis 34:372
Peach yellow bud mosaic 34:659
Pierce's disease of grape 36: 120, 122
Sugar-beet savoy 32:350
Miscellaneous
Soil being blown by wind 9:474

DISTRIBUTION OF PATHOGEN (Maps)
Bacterium solanacearum 7:156
Cephalosporium gregatum 38:794
Cephalosporium sp. 40:311
Cronartium comptoniae 19:455
Cronartium ribicola 7:21; 25:1107
Cytospora sp. 31:897
Elsinoe piri 36:460
Elsinoe solidaginis 29:971
Endothia parasitica 4:237
Fusarium vasinfectum 22:771
Giberella saubinetti 11:116
Kuehneola uredinis 40:200
Oozonium sp. 27:154
Ophiobolus cariceti 12:67

DISTRIBUTION OF PATHOGEN (Maps) (Cont'd.)

Peridermium peckii 1:95
Peronospora tabacina 24:345, 353; 25:629, 631
Phymatotrichum omnivorum 29:486, 488; 35:300
Phytomonas malvacearum 32:82
Phytophthora cinnamomi 35:166; 41: 744
Phytophthora infestans 24:77
Puccinia graminis tritici 14:361; 19:985; 22:115, 124, 133; 23: 344, 345, 351; 33:885, 892, 983; 34:485
Rhizoctonia solani 22:848
Sclerotinia fructicola 29:347
Sclerotinia laxa 29:347
Thyrospora curoineaeforme 15:716
Tilletia laevis 17:173; 20:496, 24: 1
Verticillium albo-atrum 22:771
Virus
Blackberry dwarf 17:690
Citrus psorosis 34:352
Potato yellow dwarf 12:124
Tobacco mosaic, Nicotiana spp., with reference to 41:344
General Agent Uncertain
Littleleaf of shortleaf pine 41: 941
General
Arctic Circle where Spores Collected 40:654
Range of Nicotiana paranda in Chile 37:724
Relief Map of Szechuan Province, China 35:889

INFECTION
Anguillulina dipsaci, garlic 25: 197
Anguillulina dipsaci, strawberry 26:607, 608
Anulus pratensis, Jimson weed 40:837
Anulus pratensis, tobacco 40:837
Anulus pratensis var. phaseoli, bean 40:824
Anulus pratensis var. phaseoli, Jimson weed 40:837
Aphelenchoides fragariae, chrysanthemum 25:621
Aphelenchoides fragariae, strawberry 26:589
Heterodera schachtii, sugar-beet 7:270
Histiobdella sphaerula, sweet clover 33:525
Ipomoea batatas, sweet potato 35:696
Fusarium moniliforme, sugar cane 19:343, 349, 350, 351, 352, 353, 357, 359, 361, 362, 366 (color)
Fusarium sp., corn 23:673
Fusarium sp., sorghum 23:673
Marmor dipsacum, teasel 41:193
Marmor flavopunctum, bean 40:847
Marmor medicaginis var. phaseoli, bean 41:965
Marmor melonis, muskmelon 37:810, 811
Marmor secretum, buckwheat 34:82
Phytophthora capsici, tomato 34: 318
Pythium oligandrum, watermelon 36:784
Pythium spp., sugar-beet 19:317, 318
Sclerospora macrospora, oat 32:869
Sporonema oxycocci, apple 34:438
Thecaphora solani, potato 34:712
Tilletia caries, wheat 20:662
Tilletia laevis, wheat 20:667
Tylenchus tritici, rye 9:294
Virus
Bean mosaic, bean 40:849
Bean yellow mosaic, gladiolus strain, bean 40:849
Alfalfa virus, cucumber 36:143
Alfalfa virus, tobacco 36:143
Alfalfa virus No. 2, alfalfa 37:639
Apricot mosaic, apricot 32:180
Apricot plum virus 31:327
Asparagus bean virus, asparagus bean 32:520
Celery virus No. 1, banana
Cherry mild rugose mosaic, cherry 40:995, 996
Cherry rasp-leaf, cherry 33:4; 33:621
Cherry tatter leaf, cherry 36: 78
Cherry tatter-leaf, plum 36:78
Chrysanthemum stunt, chrysanthemum 41:948
Coleus mosaic, Coleus 35:226
Cranberry false blossom, Vaccinium macrocarpon 35:615

[illegible] (Cont'd.)
Crotalaria mosaic, Crotalaria incana 40:514
Cucumber mosaic, cucumber [illegible] 32:777
Cucumber mosaic, cowpea 24:759
Cucumber mosaic, dodder 34:159
Cucumber mosaic, lily 34:541
Elm mosaic, elm 33:1197
Filarse red leaf, Erodium moschatum 41:582
Filarse red leaf, Geranium dissectum 41:585
Lettuce "Big Boston" dieback, lettuce 6:304
Lily ovarec subtle, lily 34:531
Papaya ring-spot, papaya 39:490
Pea mosaic, pea 24:779
Pea virus No. 1, pea 27:545, 548, 553
Peach rosette mosaic, peach 31:354
Pear stony pit, pear 29:361
Pecan mosaic, pecan 27:806
Potato crinkle mosaic, potato 26:603
Potato mild mosaic, potato 26:603; 29:47
Potato spindle tuber, potato 16:305
Prune dwarf, plum 34:1042
Prune dwarf, prune 34:1045
Prunus veinclearing, cherry 31:365
Lily necrotic-fleck, lily 34:532, 533, 546
Soja virus No. 1, soybean 38:726
Squash mosaic, squash 34:406, 407
Strawberry crinkle, strawberry 23:711
Sugar-beet curly top, flax 35:603, 604; 39:1003
Sugar-beet curly top, muskmelon 38:934, 935
Sugar-beet curly top, Oxalis stricta 19:1032
Sugar-beet curly top, Persian melon 38:934
Sugar-beet curly top, Suaeda moquini 15:757
Sugar-beet curly top, sugar-beet 15:757; 27:774, 775; 35:32
Sugar-beet curly top, tobacco 29:748; 33:596
Sugar-beet curly top, tomato 41:416
Tobacco broad ring-spot, Nicotiana glutinosa 32:607

D STORTION (Cont'd.)
Tobacco broad ring-spot, tobacco 32:607
Tobacco broad ring-spot, tomato 32:603
Tobacco leaf-curl, Datura stramonium 33:567
Tobacco mosaic, Browallia speciosa 28:365
Tobacco mosaic, Cynoglossum amabile 24:320
Tobacco mosaic, Tagetes patula 24:320
Tobacco mosaic, tobacco 24:847, 849; 28:914
Tobacco severe-etch, Nicotiana glutinosa 36:645
Tobacco streak, burbank 30:428
Tobacco streak, tobacco 35:1029
Tomato mosaic, plus cucumber mosaic tomato 26:921, 922
Tomato spotted-wilt, Cineraria sp. 34:942, 943
Tomato-spotted-wilt, Nicotiana glutinosa 30:294
Tomato spotted-wilt, tobacco 30:292
Tomato spotted-wilt, tomato 24:944; 30:300
Watermelon mosaic, watermelon 23:742, 743
Genetic
Prunus cerasifera 35:48, 49
Non-parasitic
Olive, boron deficiency 33:934
Sugar-beet 35:911, 912, 913

DODDER
Cuscuta americana, citrus 39:412
Cuscuta californica, Cuscuta americana 36:587
Cuscuta subinclina, Rhus laurina 40:214
Cuscuta sp., citrus 39:619
Infection by dodder influences speed of virus movement in host plant, sugar-beet 34:920
Transmitting viruses by means of dodder 31:650

DOWNY MILDEW (See: Mildew)

DROP
Sclerotinia sclerotiorum, cabbage 15:250, 260

Aphelenchoides fragariae, strawberry 28:586
Aspergillus flavus, soybean 35:12
Balansia hypoxylon, Aristida glauca 30:665
Bitylenchus dipsaci, sweet clover 28:524
Blakeslea trispora, sweet potato 35:697
Fusarium moniliforme, cotton 17:231
Fusarium moniliforme var. subglutinans, corn 28:691
Fusarium orthoceras var. pisi, pea 28:804
Fusarium oxysporum f. matthioli, Matthiola sp. 38:400
Fusarium solani f. martii, pea 30:672
Fusarium spp., barley 25:316, 322
Helminthosporium spp., barley 25:316, 322
Macrophomina phaseoli, Chamaecrista procumbens 34:1078
Marmor diversiforme, bean 34:511
Marmor medicaginis var. Ladino, peanut 39:522
Marmor medicaginis var. Ladino, soybean 39:522
Marmor phaseoli, bean 34:685
Marmor tabacum plus Marmor cucumis, tomato 39:542
Marmor terrestre, oat 36:361, 362
Monilochaetes infuscans, sugarcane 31:864
Neocosmospora vasinfecta, Andropogon scoparius 34:644
Peridermium cerebroides, Pinus radiata 19:330
Physoderma sp., Agropyron repens 27:844
Phytomonas dieffenbachiae, corn 28:478
Phytomonas medicaginis var. phaseolicola, bean 34:474
Phytomonas stewartii, oat 28:478
Pythium arrhenomanes, sorghum 39:1062
Pythium spp., corn 39:73, 80, 82
Pratylenchus pratensis, tobacco 39:1
Rhizoctonia solani, Alyssum maritimum 20:287
Rhizoctonia solani, oat 22:829
Rhizoctonia solani, strawberry 31:[illegible]

DWARFING (Cont'd.)

Sclerotium bataticola, sweet potato 34:840
Systremma acicola, Pinus palustris 31:62, 63
Thielavia basicola, tobacco 6:168
Tilletia laevis, wheat 8:108, 109, 111; 34:127
Tilletia tritici, wheat 8:108, 109, 111; 22:648
Tilletia tritici (dwarf bunt strain), [illegible]
Tilletia tritici (dwarf bunt strain), wheat 31:[illegible]
Tylenchus dipsaci, narcissus 14:498
Tylenchus tritici, rye 9:284
Tylenchus tritici, wheat 7:453
Urocystis brassicae, Brassica campestris var. sarson 28:135
Verticillium albo-atrum, tomato 41:967
Viruses
Alfalfa dwarf, alfalfa 21:73
Alfalfa witches'-broom, alfalfa 36:766
Alfalfa witches'-broom, red clover 35:786
Alfalfa witches'-broom, Medicago [illegible] 21:[illegible]
Alfalfa virus No. 2, alfalfa 27:869
Aster-yellows, Erigeron canadensis 21:375
Bean virus No. 2, bean 40:[illegible]
Blackberry dwarf, blackberry 17:631, 632, 633
Cabbage mosaic, cabbage 41:1086
Celery mosaic, pepper 25:305
Celery mosaic, squash 25:305
Celery virus No. 1, corn 24:1036
Red clover vein mosaic, pea 27:1054; 41:814
Crotalaria incana mosaic, C. incana 40:514
Cucumber mosaic, cowpea 24:758
Cucumber mosaic, plus lily-mottle, lily 34:533, 536
Cucumber virus No. 1, lily strain, tulip 31:840
Delphinium virus, delphinium 24:470, 471
Delphinium virus, Lactuca sco-arium 24:478
Fragaria virus 5, strawberry 31:850

DWARFING (Cont'd.)
Tilarea red leaf, Nicotiana rustica 41:825
Tilarea red leaf, Geranium dissectum 41:825
Pierce's disease of grape, white sweet clover 41:925
Lettuce brown blight, lettuce 30:55
Lily coarse mottle, 34:723
Lily coarse mottle, Lilium tigrinum 34:727
Lily mottle plus cucumber mosaic, lily 34:533, 536
Lily rosette, lily 38:850
Lily virulent coarse mottle, lily 34:723
Onion yellow dwarf, onion 19:74
Pea mottle, bean 32:109
Wisconsin pea stunt, pea 41:814
Peach buckskin, peach 35:611
Little peach, peach 26:203, 214
Peach yellow bud mosaic, peach 34:639
Potato green dwarf, potato 36:672, 673
Potato latent mosaic, potato 26:796
Potato leaf roll, potato 8:511, 516, 523, 524, 525
Potato mosaic, potato 10:37
Prune dwarf, peach 32:748; 34: 1042
Prune dwarf, plum 32:744
Prune dwarf, prune 32:744, 745; 34:1042
Prune virus, prune 26:1146
Rape virus, leaf mustard 37:941
Raspberry mild streak, raspberry 38:223; 39:369
Strawberry dwarf, strawberry 18:440
Sugar-beet curly top, buckwheat 9:421
Sugar-beet curly top, Chenopodium album 9:416
Sugar-beet curly top, Erodium cicutarium 9:415
Sugar-beet curly top, Medicago hispida 9:417
Sugar-beet curly top, squash 28:654
Sugar-beet curly top, Stellaria media 9:420
Sugar-beet curly top, Urtica urens 9:419

DWARFING (Cont'd.)
Tobacco leaf curl, [illegible]
Tobacco leaf curl, tomato 38:355, 357
Tobacco mosaic, Cynoglossum amabile 24:320
Tobacco mosaic, Eryngium aquaticum 37:824
Tobacco mosaic, Tagetes patula 24:320
Tobacco mosaic, tomato 6:535
Tobacco necrosis, tulip 40:300
Tobacco ring-spot, cucumber 34:75
Tobacco ring-spot, petunia 21:269
Trifolium virus No.1, hop clover 38:108
Genetic
Strawberry 23:657
Non-parasitic
Aphid and red spider infestation, milo 30:275
Aphid infestation, lily 38:850
Boron deficiency, beet 29:123, 124
Boron deficiency, olive 33:936
Boron deficiency, sweet potato 36:165
Crinkle leaf, cotton 27:1172, 1173
Heat injury, peanut 17:225
Pecan little leaf 16:278
Picric acid injury, rye 31:630

EFFECT OF ONE PLANT SPECIES ON GROWTH OF ANOTHER, ADJACENT, SPECIES
Influence of Walnut 15:777, 782; 17:536, 538, 539

ELEVATED VEIN
Non-Parasitic, sweet potato roots 23:[illegible]

ENATIONS
Cherry rosspleaf virus, cherry 32: 334; 33:621
Pea mosaic virus, crimson clover 25:163
Pea virus No. 1, pea 27:247, 838
Sugar-beet curly top virus, sugar-beet 27:774, 775
Tobacco ringspot virus, tobacco 25:176, 177

ENTOMOLOGY
Insect Control
Aphids and red spiders, selenium 30:275
Insect Injury
Aspenticinus duplicatus, Rhinocoenosa crucigalli 31:833, 834

Through Stomata (cont'd.)
Phycalospora obtusa 27:618
Physoconus dissolvens 18:267
Plasmopara viticola 2:248, 249
Pseudomonas campestris 4:277
Pseudomonas pisi 17:825
Puccinia coronata 34:31
Puccinia graminis tritici 25:1049
Puccinia sorghi 12:92; 17:825
Rhizoctonia solani 26:999
Sclerotinia fructicola 26:1058
Septoria lycopersici 25:791
Taphrina deformans 15:72
By Direct Penetration. External Cells of Host
Botrytis cinerea 29:652
Cladosporium carpophilum 19:317, 518
Colletotrichum falcatum 34:853
Colletotrichum phaseolorum 38:229, 240
Colletotrichum pisi 11:502
Colletotrichum truncatum 41:979
Corticium areolatum 30:154
Diplocarpon earliana 24:687, 692
Fusarium conglutinans var. callistephi 27:941
Gloeosporium piperatum 16:349
Glomerella rufomaculans 2:168
Gymnosporangium interstitiale 36:461, 464
Heterosporium compressi 40:556
Hyoscyamus la cerasella 20:538
Hyposphaerella lignicola 39:793
Ovulinia azaleae 30:239, 240
Peridermium sp., 25:826; 26:30
Peronospora parasitica brassicae, race 2 39:[illegible]
Phytophthora cambivi 56:714
Polyporus hispidus 19:737
Pseudopeziza ribis 26:146
Rhizoctonia solani 29:760
Sclerospora graminicola 27:311
Sclerotinia sclerotiorum 26:1058
Septoria apii 22:769
Septoria tritici 12:508
Spaerulina trifolii 15:[illegible]
Taphrina deformans 45:56
Urocystis cepulae 31:[illegible]
[illegible] 37:549
[illegible] 34:[illegible]

ENTRANCE (Cont'd.)
By Direct Penetration: External Cells of Host (cont'd.)
Ustilago zeae 19:442; 24:1015, 1017
Venturia inaequalis 21:482
By Direct Penetration: Internal Cells of Host
Colletotrichum falcatum 34:830, 833
Colletotrichum truncatum 41:981
Fomes fomentarius 28:604
Fomes ignarius 28:604
Fusarium conglutinans var. callistephi 27:741
Gymnoconia interstitialis 25:461
Peronospora parasitica brassicae, race 2 39:542
Phoma terrestris 31:909
Phymatotrichum omnivorum 25: 567, 569
Physodera graminis 41:1067
Pythium butleri 28:513
Sclerospora graminicola 28:848
Sphaceloma sp. 28:106
Urocystis occulta 24:884; 30:929

EPINASTY
Bean virus No. 2, bean 40:686
Fusarium bulbigenum var. lycopersici, tomato 31:282; 33:1007, 1008, 1011
Potato virus X, Gomphrena globosa 41:436
Potato virus Y, Physalis floridana 41:432
Potato virus Y, potato 41:436
Tobacco mosaic virus, Datura stramonium 41:436
Tobacco mosaic virus, Nicotiana glutinosa 41:436

EPIPHYTOLOGY
Effect of Absence of Crop Rotation on Infection
Erwinia phytopthora, larkspur 33:808
Effect of Age of Tissues on Infection
Colletotrichum trifolii, clover 24:804
Diplodia theobromae, guayule 36:569
Erysiphe polygoni, clover 24:804

EPIPHYTOLOGY (Cont'd.)
Helminthosporium sativum, Agropyron cristatum 39:110
Macrosporium sarcinaeforme, clover 24:804
Pythium debaryanum, Agropyron cristatum 39:110
Pythium graminicolum, Agropyron cristatum 39:109
Uromyces fallens, clover 24:804
Ustilago nigra, barley 33:203
Viruses
Peach wart, cherry 35:609
Tobacco yellow-mosaic, mutant BSY, tobacco 33:552
Insect
Mealy bug, pineapple 37:343
Effect of Associations of Organisms on Infection
Helminthosporium sativum and Bacillus subtilis, wheat 39:1011
Helminthosporium sativum and Penicillium sp., wheat 39: 1011
Helminthosporium sativum and Trichoderma lignorum, wheat 39:1011
Effect of Concentration of Inoculum on Infection
Fusarium orthoceras var., pisi, pea 21:802
Effect of Date of Sowing Seed on Infection
Puccinia graminis tritci, wheat 38:165
Effect of Depth of Planting Seeds on Infection
Rhizoctonia spp., Lupinus angustifolius 36:480
Effect of Distance of Inoculum from Plant on Infection
Helminthosporium sativum, Agropyron cristatum 39:106
Pythium debaryanum, Agropyron cristatum 39:106
Pythium graminicolum, Agropyron cristatum 39:106
Effect of Gaseous Vapors on Infection
Tobacco mosaic virus, Nicotiana tabacum x N. glutinosa, HCN 31:985

Effect of Injury to Plant on Infection
Fusarium oxysporum, flax seeds 27:643
Fusarium oxysporum f. batatas, sweet potato roots 39:881
Effects of Inoculation Method on Infection
Helminthosporium victoriae, oat 37:798
Effect of Light on Infection
Puccinia coronata avenae, oat 29:742
Puccinia graminis, barley 24:510, 511, 513
Puccinia graminis tritici, wheat 25:721
Cherry virus, cherry 41:137
Effect of Temperature on Infection
Colletotrichum lindemuthianum
Cytospora, sweet potato 15:392
Urnula phytophthora, larkspur
Fusarium bulbigenum var. lycopersici, tomato 36:223
Fusarium sp., celery 25:591
Helminthosporium victoriae (culture extract of), oat
Puccinia coronata, oat 37:412
Pythium sp., sugarcane 20:326, 327
Sclerotium cepivorum, onion
Cherry virus 41:137
Effect of Nematode-Trapping Fungus on Infection
Heterodera marioni, pineapple
Effect of Host's Nutrition on Infection
Fusarium elaeidis 33:216, 219
Colletotrichum trifolii, clover 24:800, 801
Uromyces polygoni, bean 49:
Uromyces polygoni, clover 24:800, 801
Fusarium lycopersici, tomato
Phytophthora infestans, potato

Effect of Host's Nutrition on Infection (cont'd.)
Helminthosporium carposaprum, tomato 36:996
Macrosporium sarcinaeforme, clover 24:800, 801
Polyporus schweinitzii, Pinus strobus 27:1130, 1133
Puccinia graminis tritici, wheat 39:389
Uromyces fallens, clover 24:800, 801
Tobacco ring-spot virus, tobacco 53:79
Xanthomonas phaseoli, bean 36:616
Non-Parasitic
cotton, manganese toxicity 28:585, 586
pecan, iron deficiency 22:547, 598, 599
root-rot 18:275, 276
Effect of pH on Infection
Erysiphe polygoni, cowpea 20:654
Fusarium lycopersici, tomato
Phymatotrichum omnivorum, cotton 29:806
Thielaviopsis basicola, tobacco 32:475
Verticillium albo-atrum var. oxatum, eggplant 24:912
Effect of Position of Plant on Infection
Phytophthora capsici, tomato 36:331
Effect of Pre-Storage Treatment of Plant on Infection
Phoma betae, sugar beet 40:485
Effect of Secondary Invader on Infection
Puccinia asparagi (prior) and Fusarium roseum (subsequent), asparagus 37:
Effect of Soil Type on Infection
Fusarium lini, flax 27:643
Helminthosporium sativum, flax 27:643
Effect Source of Insects in Infection
Mealy bug, pineapple
Fusarium lini, flax 27:544, 643
Fusarium sp., celery 25:590, 59

PHYTOLOGY (Cont'd.)
Direct Source of Resistance on Infection (cont'd)
Fusarium sp., cotton 33:480
Fusarium sp., sweet potato 33:480
Fusarium sp., tobacco 33:480
Helminthosporium sativum, flax 27:534, 543
Heterodera marioni, tobacco 36:350
Phytomonas medicaginis var. phaseolicola, bean 34:474
Phytomonas stewarti, corn 29:1059
Virus
Tobacco mosaic, tobacco 37:824, 826, 830
Effect Stomatal Movement on Infection
Bacterium tabacum, tobacco 30:269, 270
Xanthomonas phaseoli var. sojense, soybean 36:386
Effect of Temperature on Infection
Alternaria solani, tomato 41:129, 131, 133
Armillaria mellea, apricot 36:310, 312
Armillaria mellea, geranium 36:311, 313
Armillaria mellea, peach 36:312
Armillaria mellea, pepper tree 36:314
Bacterium solanacearum, tomato 11:456
Bacterium tabaci, tobacco 11:456
Botrytis gladiolorum, gladiolus 39:263, 264
Cladosporium cucumerinum, cucumber 40:1095
Diplodia theobromae, guayule 36:569
Erysiphe graminis, barley 41:625
Fusarium lini, flax 7:359
Fusarium oxysporum f. pisi, race 2, pea 39:774
Fusarium roseum, snapdragon 41:546
Helminthosporium carposaprum, tomato 36:989
Mycogone perniciosa, mushrooms 20:78
Physalospora corticis, blueberry 32:1070

EPIPHYTOLOGY (Cont'd.)
Effect of Temperature on Infection (cont'd.)
Phytomonas medicaginis var. phaseolicola, bean 30:262
Phytomonas tumefaciens, Bryophyllum calycinum 31:975
Phytomonas tumefaciens, Nicotiana glutinosa 31:975
Phytomonas tumefaciens, Nicotiana glutinosa x N. tabacum 31:975
Phytomonas tumefaciens, Sedum spectabile 31:975
Phytomonas tumefaciens, tomato 31:975
Phytomonas woodsii, carnation 21:116
Phytophthora infestans, tomato 11:456
Puccinia antirrhini, snapdragon 25:981; 41:540
Puccinia psidii, Pimenta officinalis 26:160
Pythium spp., corn 39:80; 41:750
Pythium spp., Lepidium sativum 13:280
Rhizoctonia solani, alfalfa 36:640
Sclerotium cepivorum, onion 16:710
Thielaviopsis basicola, tobacco 32:475
Verticillium dahliae, eggplant 23:134, 135
Verticillium dahliae and V. albo-atrum, eggplant 23:140, 142
Viruses
Cherry virus, cherry 41:137
Lettuce "big vein" virus, lettuce 32:543
Phaseolus virus No. 2, soybean 38:729
Potato mosaic, potato 12:439, 16:610
Soja virus No. 1, soybean 38:729
Sweet potato virus, sweet potato 19:940
Tobacco mosaic, tobacco 11:456; 29:442; 37:833
Tobacco yellow mosaic, mutant BSY, tobacco 33:558

PLANTOSPORE (Cont'd.)
Effect of Time of Day Inoculation Performed on Infection
Helminthosporium oryzae, rice 37:284

POISON (See: Suppression)

POPULATION
Fusarium oxysporum, potato 9:260
Potato "late-breaking" virus, potato 38:464
Psyllid feeding, potato 36:898
Non-parasitic, potato 31:348

PRE-HARVEST
Genetic, potato 37:597, 598

PENETRATION
Anguillulina dipsaci, apple 26:1129
Bacterium tumefaciens, sweet pea
Bacterium tumefaciens, Tropaeolum
Exoascus cerasi, Japanese cherry 19:20
Exoascus mirabilis, Prunus angustifolia 15:215, 220
Gymnosporangium blasdaleanum, cedar 4:865
Microstroma juglandis, Carya ovata
Peritrogenospora paspali, Andropogon scoparius 24:678, 679
Peridermium harknessii, Pinus radiata 6:247
Phlyctaena vagabunda, Vitis quadrangularis 12:436, 437
Pythium tumefaciens, Radicum entricolate
Urocystis agropyri, Agrostis alba 49:355
Viruses
Alfalfa witches'-broom, Lotus corniculatus 41:457
Alfalfa witches'-broom, Medicago lupulina 41:457
Cranberry false-blossom, Vaccinium macrocarpon 35:813
Potato giant hill, potato 24:

FASCICULATION (Cont'd.)
Viruses (cont'd.)
Raspberry virus, raspberry 21:
Sugar-beet curly top, flax 35:603, 605
Non-parasitic
Alfalfa 36:765
Bean 26:710, 712; 34:505
Betula pendula dalecarlica 26:390, 391
Black locust 19:163, 165
Elm 33:1198, 1199
Holodiscus discolor 21:934
Pecan 27:605, 607, 608
Peony 18:244
Potato 14:374, 382
Robinia pseudoacacia 23:86, 87

FERNLEAF
Delphinium virus plus tobacco mosaic virus, tomato 24:476, 477
Lily virulent coarse mottle virus, Easter lily 34:718
Marmor dipsacum, teasel 41:192
Raspberry virus, raspberry 21:755
Squash mosaic virus, squash 34:406
Tomato rosette virus, tomato 41:
Tomato virus, tomato 20:28, 30, 31, 39; 21:757; 22:631

FORKING
Red pine 28:799, 801

FUNGICIDE STUDIES
Antibiotics
Actidione 40:157, 158
Antimycin 39:530
Penicillin 39:1050
Common Names (and formulae) of 5 Commercially Available Fungicides (ferbam, ziram, nabam, zineb, thiram) 40:118
Condensation of Sulphur on Slide
Crystals of sodium pentathionate
Crystals of barium pentathionate
Crystals of potassium pentathionate
Demonstration of Value of Spraying Cryptosphaera infestans, Cornwall

FUNGICIDE STUDIES (Cont'd.)
Concentration of Value of Spreaders (cont'd.)
Venturia inaequalis, ascipores 30:548
Evaluation of Fungicides in Culture 38:173
Flocculation of Spreaders 34:453
Fungicide Application Equipment Testing 38:800; 41:1020
Fungicide Residues
Bordeaux 33:809
Sulfur 33:689
Microscopic Study of Sulfur 29:557
Official Organoleptic Method of Testing Dust Seed Treatments in Cereal Smut Control 34:401
Official Methods for Evaluating Protectant Fungicides 33:557
Particle Size, copper carbonate 32:380
Particle Size, sulfur and ammonium zeolite 23:539
Precipitation Membranes, bordeaux mixture 3:35, 36, 37; 4:180; 33:501
Standardization of Fungicides, bordeaux mixture 33:633
Standardized Spray Nomenclature 37:337
Test Tube Dilution Technique for Use With Slide Germination Method of Evaluating Protectant Fungicides 37:534

FUSIONS
Mycelial fusions
Botrytis cinerea 3:174
Corticium koleroga 23:377
Dactylella spermatophaga 31:26
Puccinia graminis tritici 37:746
Puccinia helianthi 25:1088
Puccinia tritiicina 37:745, 748
Ramularia destructans 8:557
Ramularia pansuicola 8:369
Scirrhia scicola 40:727
Sclerotium bataticola 7:311
Septoria apii 22:797
Ustilago crameri 33:1128
Spore fusions
Tilletiopsis dehiscens 36:104
Ustilago avenae 27:549
Ustilago striiformis 30:100

GALLS (See Tumefaction)

GASES FROM PLANT PARTS
Ethylene from diseased parts, cherry (Coccomyces hiemalis) 40:207
Ethylene from healthy parts, cherry 40:207
Ethylene from healthy parts, rose 40:207

GERMAE
Ustilago avenae 27:549

GERMINATION OF FUNGUS-INFECTED SEED
Fusarium sp., barley 25:315
Helminthosporium sp., barley 25:315

GRAFTING
Root grafting
Ceratostomella ulmi, elm 25:1040
Chalara quercina, oak 34:639
Citrus psorosis virus, citrus 34:373
Graft Failure Due to Pathogen
Chalaropsis thielavioides, rose 36:282

GROWTH OF ORGANISM IN CULTURE
Actinomyces scabies 9:423; 16:331; 31:715, 716
Alternaria compacta 34:223
Alternaria crassa 7:335
Alternaria longipes 21:654
Alternaria solani 7:317, 335; 19: 534; 33:618, 730
Alternaria sp. 26:540
Ansatospora macrospora 34:93
Aplanobacter agropyri 6:350 (color)
Aplanobacter stewarti 8:442
Aplanobacter stewartii 30:277
Armillaria mellea 31:804, 829; 36: 306; 41:675, 679
Ascochyta imperfecta 35:841
Ascochyta pinodella 39:943
Aspergillus alliaceus 24:290
Aspergillus sclerotiorum 25:307
Bacillus "C" 32:189
Bacillus amylovorus 5:316
Bacteriophage 15:370
Bacterium [illegible] 4:842
Bacterium flaccumfaciens 16:15
Bacterium marginatum 37:351, 353
Bacterium phaseoli 16:15
Bacterium sp. 29:855
Beauveria bassiana 21:1117
Botryosphaeria berengeriana 6:348
Botrytis alii 40:750, 752, 753, 755, 762

Asterina stellifera 21:1147; 22:380, 568; 28:569, 573
Astrotia mali 21:1147
Centrospora acerina 41:1026
Cephalosporium carpogenum 21:1143
Cephalosporium cinnamomeum 30:971
Cephalosporium fici 38:712
Cephalosporium gregatum 38:794
Ceratostomella fimbriata 39:553, 554; 41:180
Cercospora cladosporioides 34:256
Chalara quercina 34:632, 641
Chalaropsis thielavioides 30:800
Cladosporium malorum 21:1143
Cylindrosporium paeoniae 27:172, 176
Cladosporium pisicolum 24:893
Cladosporium viciae 15:462
Colletotrichum lagenarium 37:565
Colletotrichum lindemuthianum 12:3[illegible]
Colletotrichum phomoides 38:248
Colletotrichum villosum 35:983
Collybia dryophila 22:283, 292
Collybia velutipes 31:827
Comiophora cerebella 33:990
Coniothyrium fuckelii 1:102
Corynesporium aspedonicum 33:[illegible]
Corynesporium cerasmenti 30:596; 32:225
Corynesporium carotiale 30:596
Corticium areolatum 30:123
Corticium centrifugum 30:143, 146
Corticium koleroga 23:861
Corticium microsclerotia 29:567
Corticium praticola 19:1064, 1077
Corticium solani 35:376
Corticium vagum 19:1054; 29:567
Cunninghamella mainecklla 31:1073
Cytospora canisia littorella 31:885
Cytospora chrysosperma 30:466, 469
Dactylosporium sp. 30:982
Dactylella aspermatophora 28:85
Dendrodochium viscosum 38:701, 702
Dendrophoma sp. 26:756
Diplocarpon citri 25:763
Diaporthe phaseolorum 37:451
Diaporthe phaseolorum var. batatatis 41:630, 641
Diaporthe phaseolorum var. sojae 32:401, 38:601
Diaporthe vaccinii 30:443
Diplodia zeae 39:96
Diplodiopsis elongata 15:[illegible]
Diplodia corticola 10:[illegible]
Diplodia natalensis 10:[illegible]
Diplodia zeae 29:68; 30:1[illegible]; 33:603
Diplodia sp. 29:1034
Diplodina delphinii 40:625
Elsinoe ampelina 26:69, 192
Elsinoe dolichi 35:344, 345
Elsinoe fawcetti 35:344
Elsinoe phaseoli 35:344
Elsinoe randii 28:77
Endothia parasitica 3:304; 5:44 8:495
Erwinia carotovora 16:164; 34:761; 35:522
Erwinia amylovora 27:19; 33:406
Eutypella parasitica 28:742
Fomes applanatus 29:611
Fomes igniarius 29:611
Fomes pinicola 33:521, 980
Fusarium abominatum 19:868
Fusarium avenaceum 19:151
Fusarium batatatis 22:283, 292
Fusarium batatis 4:390
Fusarium bulbigenum var. lycopersici 31:165; 33:193, 194, 618, 956
Fusarium coeruleum 19:860
Fusarium culmorum 19:149, 150, 868; 33:360
Fusarium flocciferum 39:365
Fusarium fructigenum malus 19:[illegible]
Fusarium graminearum 19:151; 39:[illegible]
Fusarium herbarum gibberelloid[illegible] 19:868
Fusarium lini 7:360
Fusarium martii 19:868; 27:68
Fusarium martii phaseoli 19:868; 22:375
Fusarium moniliforme 20:81[illegible]
Fusarium nivale 19:151
Fusarium oxysporum 24:4[illegible]
Fusarium oxysporum f. b[illegible] 956
Fusarium retusum 33:956
Fusarium semitectum 19:869
Fusarium solani 19:151
Fusarium solani f. batatas 41:[illegible]
Fusarium solani f. cucurbit[illegible] 135, 136
Fusarium solani f. martii [illegible]
Fusarium sirilatum 19:869
Fusarium sulphureum var. elongatum 38:380
Fusarium tricinctum scirpi 19:869
Fusarium tricinctum 19:[illegible]

GROWTH OF ORGANISM IN CULTURE (Cont'd.)

Fusarium vasinfectum 30:516
Fusarium sp. 20:960, 961; 25:311, 355; 26:251
Gymnoderma lucidum 25:135
Geotrichum sp. 30:338
Gibellina cerealis 24:947
Gilocladium sureum 32:447
Gloeodes pomigena 32:845
Gloeosporium fructigenum 5:257
Gloeosporium gloeosporioides 2:234
Gloeosporium limetticolum 2:234
Gloeosporium olivarum 32:643
Gloeosporium sp. 19:605
Glomerella cingulata 5:257; 21:1186; 25:94
Gnomonia sp. 38:702
Guignardia bidwelli 36:909
Guiguardia bidwelli f. muscadinii 36:909
Helminthosporium dictyoides 25:357
Helminthosporium erythrospilum 25: 355, 358
Helminthosporium gramineum 30:1050
Helminthosporium saccheri 18:763, 764; 31:54, 58, 59, 60
Helminthosporium sativum 15:789, 791; 19:158, 160, 161; 23:381, 618; 30:1019, 1026, 1028; 41: 1017
Helminthosporium turcicum 30:535
Helminthosporium "Z" 39:1021
Helminthosporium sp. 21:48, 49, 50; 24:[illegible]; 25:311
Lenzites sepiaria 21:935
Leptosphaeria avenaria 12:457, 459, 470
Macrophoma zeae 36:205
Macrosporium sarcinaeforme 29:544
Marasmina melonis 37:585
Merulius lacrymans 31:829
Micrococcus trigonosporus 38:971
Mucor mucedo 20:960, 961
Mycosphaerella populicola 31:245
Oospora lactis 4:320
Ophiobolus tritici 30:712
Penicillium expansum 22:889
Penicillium notatum 41:994
Penicillium sp. 21:355
Pestalozzia funerea 4:384
Phlyctaena limicola 20:932, 936, 938
Pholiota adiposa 31:829
Phoma apiicola 34:93
Phoma betae 26:599, 39:851

GROWTH OF ORGANISM IN CULTURE (Cont'd.)

Phoma lingam 8:413; 39:850, 851, 855
Phoma medicaginis 26:1017
Phoma pomi 2:72
Phoma terrestris 19:700, 701, 702
Phomopsis californica 12:423
Phomopsis citri 2:112; 12:423
Phycomyces blakesleanus 29:594, 595
Phymatotrichum omnivorum 22:919; 25:565; 38:144
Phyllostieta antirrhini 10:245
Phyllostieta solitaria 23:507
Physalospora cydoniae 3:295
Physalospora obtusa 27:806
Physalospora zeae 3:295
Phytomonas corylina 30:714
Phytomonas dissolvens 16:267
Phytomonas medicaginis var. phaseolicola 16:927
Phytomonas polycolor 20:699
Phytomonas sepedonica 33:406
Phytomonas stewartii 27:1086; 28: 389, 391, 774, 776
Phytophthora arecae 22:220, 224
Phytophthora cactorum 7:125
Phytophthora capsici 30:953, 955
Phytophthora citrophthora 25:764, 765
Phytophthora erythroseptica 7:125
Phytophthora infestans 16:124, 127; 37:639
Phytophthora meadii 20:954
Phytophthora melongenae 20:954
Phytophthora omnivora 16:730
Phytophthora palmivora 21:944; 22: 220, 224
Phytophthora parasitica 21:944, 945; 25:764
Phytophthora terrestria 7:125
Phytophthora spp. 20:205, 206, 207, 208
Piricularia oryzae 38:266
Pleospora lycopersici 29:544
Pleospora mali 18:568
Pleurotus ostreatus 31:829
Pleurotus ulmarius 31:829
Podosporiella verticillata 5:325
Polyporus balsameus 33:980
Polyporus schweinitzii 27:31, 33, 37; 33:980
Polyporus subcartilagineus 33:980
Polyporus versicolor 40:932
Poria mutans 33:980

Sclerotium fulvum 27:1116
Sclerotium rolfsii 21:1192; 22:375
Selenophoma bromi 35:254
Septoria apii 22:799
Septoria apii graveolentis 22:799
Septoria betaticola 4:320
Septoria bromigena 29:555
Septoria lycopersici 35:17
Septoria nodorum 12:547; 35:51; 41:576
Septoria rubi 33:990
Septoria tritici 12:559, 565, 577
Sphaceloma arachidis 35:344
Sphaceloma fawcettii 23:540; 26:39
Sphaceloma fawcettii var. viscosa 23:540
Sphaceloma lippiae 29:655
Sphaceloma ricini 35:544
Sphaceloma sp. 28:107
Sphacelotheca panici-miliacei 35:571
Sphacelotheca panici-miliacei x Sorosporium syntherismae 35:582
Sphacelotheca sorghi 20:244, 247; 24:69
Sphaeronema fimbriatum 3:166
Sphaerulina trifolii 13:126
Spicaria heliothis 29:895, 896
Sporocybe exalbes 29:518; 30:50
Sporotrichum carpogenum 21:1145
Sporotrichum malorum 19:452; 21:1145
Sporotrichum schenckii 25:69
Staphylococcus aureus 34:761; 35:522
Stemphylium sp. 18:569
Stereum gausapatum 29:506, 507, 510
Stereum purpureum 20:981
Streptomyces scabies 41:995
Streptomyces sp. 38:901
Taphrina caerulescens 15:70
Taphrina communis 15:70
Taphrina coryli 15:70
Taphrina deformans 15:70
Taphrina johansenii 15:70
Taphrina minchilis 15:70
Thielaviopsis basicola 20:1012, 1015; 32:756
Tilletia levis 20:502, 506, 665; 24:1221; 28:519
Tilletia tritici (dwart bunt strain) 41:79
Tilletia tritici 20:502, 506; 28:519

GROWTH OF ORGANISMS IN CULTURE (Cont'd.)

Tolyposporium filiferum 38:990
Trametes serialis 38:990
Trichoderma koningi 1:168
Trichoderma lignorum 1:186
Typhula gramineum 23:868
Tumor tissue, initiated by crown gall bacteria 41:980
Urocystis agropyri 39:536
Urocystis occulta 30:584
Ustilago avenae 10:956, 972; 21: 840, 859
Ustilago crameri 33:1127
Ustilago hordei 18:966, 968
Ustilago levis 18:968, 969; 21:
Ustilago nuda 16:1003; 18:96 964, 965, 978
Ustilago striaeformis 30:10 711; 36:62, 63; 37:731, 73
Ustilago tritici f. tensis 36:680,
Ustilago tritici 16:1003; 18:960 964, 974
Ustilago zeae 16:970, 980, 982; 19:426, 912; 23:852, 883; 29: 481; 33:944, 947
Valsa sordaria 30:486
Venturia inaequalis 24:23, 32
Venturia pirina 38:359, 361, 364
Verticillium albo-atrum 24:1268; 31:1132, 1136, 1137; 40:502, 505
Virus in Plant
Bean virus No. 1 plus Xanthomonas phaseoli 36:598
Tobacco mosaic virus, strains of 37:824, 826, 855
Wojnowicia graminis 25:413
Xanthomonas phaseoli 34:687; 36: 596
Xanthomonas phaseoli plus bean virus No. 1 36:598
Xylaria apiculata 31:980

Antagonistic Effects
Actinomyces sp. vs Cerat ulmi 38:86
Actinomyces sp. vs Pythium nosum 40:545
Actinomyces sp. vs Rhizoctonia solani 41:1038
Agaricus campestris vs Fusarium culmorum 29:751
Agaricus campestris vs Fusarium martii 29:751

GROWTH OF ORGANISMS IN CULTURE (Cont'd.)

Antagonistic Effects (cont'd.)
Agaricus campestris vs Fusarium oxysporum 29:751
Armillaria mellea vs Trichoderma sp. 41:679
Bacillus subtilis vs Helminthosporium sativum 39:1003
Ceratostomella ulmi vs Actinomyces sp. 38:86
Diaporthe citri vs Phytophthora citrophthora 25:764
Diaporthe citri vs Phytophthora parasitica 25:764
Fusarium culmorum vs Agaricus campestris 29:750
Fusarium martii vs Agaricus campestris
Fusarium oxysporum vs Agaricus campestris 29:751
Helminthosporium sativum vs Bacillus subtilis 39:1003
Helminthosporium sativum vs Penicillium sp. 39:1008
Penicillium sp. vs Helminthosporium sativum 39:1008
Phymatotrichum vs Trichoderma 25:565
Plectospira myriandra vs Pythium ostracodes 33:295
Phytophthora citrophthora vs Diaporthe citri 25:764
Phytophthora parasitica vs Diaporthe citri 25:764
Pythium arrhenomanes vs Actinomyces sp. 40:546
Pythium ostracodes vs Pythium periplocum 33:295
Pythium ostracodes vs Plectospira myriandra 33:295
Pythium periplocum vs Pythium ostracodes 33:295
Rhizoctonia vs Trichoderma 25:249
Rhizoctonia solani vs Actinomyces sp. 41:1038
Sclerotinia fructicola vs Streptomyces sp. 38:901
Sclerotinia sclerotiorum vs Sclerotinia sclerotiorum 29: 166
Streptomyces sp. vs Sclerotinia fructicola 38:901
Trichoderma vs Phymatotrichum (histological) 33:

GROWTH OF ORGANISM IN CULTURE (Cont'd.)
Antagonistic Effects (cont'd.)
Armillaria mellea vs Trichoderma 41:679
Trichoderma vs Rhizoctonia 25:194
Effect of Deficiency of Oxygen on
Fusarium oxysporum 38:765
Effect of Chemicals on
Ascocyta pisi (actidione) 40:157
Botrytis allii (nitrogen mustard) 40:755, 762
Botrytis cinerea (hydrochloric acid, soda ash cleaner, sodium silicate cleaner) 26:569, 575
Diplodia zeae (organic mercury) 33:1043; 33:603
Erwinia carnegieana (penicillin) 34:160
Poria pinicola (wood extract) 33:821
Sphaerella zeae (2,4-D) 38:1036
Helminthosporium sativum (2,4-D) 41:1017
Helminthosporium victoriae (2,4-D) 41:1017
Penicillium expansum (sodium orthophenyl phenate) 30:641
Penicillium notatum (2,4-D) 41:994
Poria xantha (copper naphthenate) 39:33, 34
Poria xantha f. crassa (wood extract) 33:822
Pythium debaryanum (2,4-D) 38:1036
Sclerotinia fructicola (sulfur) 38:861
Streptomyces scabies (2,4-D) 41:992
Effect of Light on
Centrospora acerina 41:1023
Diaporthe phaseolorum var. batatatis 41:539
Helminthosporium saccheri 32:58
Sporotrichum carnorum 41:525
Effect of Metabolite of
Alternaria spp. 35:9
Aspergillus spp. 35:3
Fomes annosus 28:611
Fomes igniarius 28:611
Effect of Nutrition on
Diaporthe phaseolorum var. batatatis 41:30
Effect of Nutrition on (cont'd)
Fusarium lini 7:360
Helminthosporium saccheri 32:54, 58, 59
Helminthosporium "Z" 39:1021
Macrophoma zeae 36:205
Physalospora zeae 36:205
Phytomonas stewartii 28:744, 776; 29:1054
Polyporus abietinus 40:928, 929
Polyporus versicolor 40:932
Poria subacida 40:928, 929
Rhizoctonia solani 26:837
Sclerotinia fructicola 38:861
Sclerotinia laxa 38:861
Thielaviopsis basicola 32:756
Ustilago striaeformis 30:107
Effect of pH on
Corticium microsclerotia 29:567
Corticium vagum 29:567
Effect of Presence of Host Plant on
Streptomyces scabies (sweet roots) 39:453
Effect of Temperature on
Armillaria mellea 36:306
Ceratostomella ulmi, race B 35:656
Corticium galactinum 30:146
Corticium microsclerotia 29:567
Corticium vagum 29:567
Corynaeum beijerinckii 32:226
Fusarium sp. 25:585
Helminthosporium saccheri 32:54
One Fungus Enwrapped by Another Fungus
Pythium ostracodes by Pythium periplocum 33:288
Pythium ostracodes by Pythium oligandrum 33:280
Parasitism of One Fungus by Another
Aphanomyces cladogamus attacking Pythium anandrum 36:844
Aphanomyces cladogamus attacking Pythium myriotylum 33:275, 286
Aphanomyces cladogamus attacking Pythium ostracodes 33:289
Aphanomyces cladogamus attacking Pythium salpingophorum 46:917
Aphanomyces cladogamus attacking Pythium vexans 36:845
Plectospira myriandra attacking Pythium anandrum 36:844
Plectospira myriandra attacking Pythium myriotylum 33:275

Plectospira myriandra attacking Pythium ostracodes 33:294
Plectospira myriandra attacking Pythium undulatum 36:837
Plectospira myriandra attacking Pythium vexans 36:817
Pythium acanthicum attacking Pythium anandrum 36:844
Pythium acanthicum attacking Pythium myriotylum 33:288, 290
Pythium acanthicum attacking Pythium salpingophorum 36: 816
Pythium acanthicum attacking Pythium undulatum 36:837
Pythium acanthicum attacking Pythium vexans 36:837, 837
Pythium oligandrum attacking Pythium anandrum 36:844
Pythium oligandrum attacking Pythium myriotylum 33:288, 290
Pythium oligandrum attacking Pythium salpingophorum 36: 817
Pythium oligandrum attacking Pythium undulatum 36:837
Pythium periplocum parasitising Pythium anandrum 36:844
Pythium periplocum parasitising Pythium myriotylum 33:275, 290
Pythium periplocum parasitising Pythium salpingophorum 36: 816
Pythium periplocum parasitising Pythium undulatum 36:837
Pythium periplocum parasitising Pythium vexans 36:817
Pythium vexans attacking Pythium periplocum 36:817
Trichoderma attacking Pythium 22:842
Trichoderma attacking Rhizoctonia 22:838, 839, 841
Trichoderma attacking Rhizopus 22:842
Trichoderma attacking Sclerotium rolfsii 22:842

Agaricus campestris vs Fusarium culmorum 29:735
Agaricus campestris vs Fusarium dianthi 29:733
Agaricus campestris vs Fusarium floccifernm 29:733
Agaricus campestris vs Fusarium oxysporum 29:735
Fusarium culmorum vs Agaricus campestri 29:735
Fusarium dianthi vs Agaricus campestri 29:733
Fusarium floccifernm vs Agaricus campestri 29:733
Fusarium oxysporum vs Agaricus campestris 29:733

GUMMOSIS

Aplanobacter agropyri, Agropyron Smithii (color) 6:343
Ganoderma lucidum, coconut 26:155, 157

GUTTATION

Drops containing virus, tomato 41: 79

HAUSTORIA

Cercospora personata 23:634
Coryneum microstictum var. staphyleae 21:1164
Cronartium comptoniae 19:742
Cronartium quercum 32:793
Cuscuta subinclusa 34:924
Diplocarpon earliana 24:623
Erysiphe graminis 18:902, 905
Gymnoconia interstitialis 25:463, 434
Peridermium sp. 25:828; 28:30, 41
Peronospora nicotianae 24:343
Peronospora parasitica 10:322
Phytophthora cactorum 29:853
Puccinia coronata 34:34, 35, 36, 37
Puccinia graminis tritici 33:487, 488, 490
Sclerospora graminicola 28:849
Septoria lycopersici 25:791
Tranzschelia punctata 21:136, 138

HETEROTOPHY

Fusarium oxysporum, potato 9:260

Aster yellows, periwinkle 30:1050
Potato late blight, potato 39:464, 465
Potato latent mosaic, potato 39:719
Tomato big bud, tomato 38:973
Miscellaneous
Crazy top disease, corn 29:819
Crazy top disease, Setaria viridis 29:818
Bean 31:170, 171, 172
Tomato 31:169

HOST ANATOMY (Normal)
Leather, dewberry 33:1
Bark, chestnut 4:197
Bud, corn 27:97
Bud, sweet potato 27:675
Bud, wheat 27:1116
Callus formation, sweet potato 40:
Callus formation, white potato tuber 9:490, 491, 492; 29:275
Cotyledon, guayule 34:509, 697
Cuticle, apple 29:283
Epidermis, lily bulb scale 34:558
Epidermis, potato tuber 3:257
Flower, wheat 6:22
Fruit, melon 36:944
Fruit, spinach 24:1025
Fruit, tomato 26:534, 535
Fruit stalk, tomato 25:545, 547
Fruit, peach fruit 26:1056
Haustorium, Cuscuta subinclusa 34:
Hypothesis, potato 12:308, 309, 310
Inflorescence, Pinus strobus roots
Leaf, Agropyron repens 41:1067
Leaf, guayule 34:696
Leaf, Manihot sp. 2:134
Leaf, olive 39:401
Leaf, Rubus sp. 25:461, 464
Leaf, sugar-beet 23:701
Leaf, tomato 25:544
Parenchyma, potato tuber 37:237
Parenchyma, sugar-beet 25:701
Pedicle, Convolvulus sp. 25:559
Peduncle, tomato 25:545, 548
Petal, Convolvulus sp. 25:562
Petal, tomato 25:544

HOST ANATOMY (Normal) (Cont'd.)
Petiole, carrot 33:116
Petiole, peach 35:624
Petiole, tomato 41:419
Plastids, tobacco 33:767
Pollen, Convolvulus sp. 25:557
Pollen, tomato 25:551
Root, aster 27:740
Root, ginseng 8:560
Root, orange 32:573, 574
Root, sweet potato 27:670
Root, tomato 32:766, 768
Seed, corn 29:906
Seed, cotton 26:1084
Seed, Nasturtium sp. 40:556
Seed, wheat 6:22
Sepal, Convolvulus sp. 25:548
Sepal, tomato 25:544, 549
Spikelet, Agropyron Smithii 6:350
Stem, cactus 32:306
Stem, corn 26:956
Stem, elm 34:824
Stem, peach 35:611
Stem, Pinus sylvestris 28:47
Stem, soybean 40:826
Stem, sweet potato 40:769
Stem, tobacco 36:465
Stem, tomato 30:968, 41:419
Stem, white pine 41:201, 275
Stomatal Number, potato 12:329, 325, 329
Stoma, peach fruit 26:1058
Stoma, Pinus strobus 28:182, 184
Stoma, strawberry leaf 24:620
Stoma, Vicia faba 31:761
Vascular System, corn stem 26:956
Vascular System, grape leaf 39:73
Vascular System, Lilium longiflorum leaf 41:68
Vascular System, sugar-beet 23:687, 695, 705
Vascular System, tomato fruit 25:543, 547
Vascular System, tomato fruit stalk 25:543
Vessels
Peach 35:620
Sugar-beet 23:685, 690; 24:304
Xylem
Citrus 33:844, 866
Pinus strobus 27:1136
Sweet potato 40:770

HOST CYTOLOGY (Normal)
Bacteria in outwardly healthy tissue 38:961
Conservates of catechol 33:739, 740

HOST MORPHOLOGY (Normal)
Boll, cotton 34:852
Branch, western white pine 41:201
Plant, tomato 35:932
Pseudostem, banana 9:390
Rhizome, banana 9:390
Seed germination, eggplant 37:915
Seed germination, pepper 37:915
Seed germination, tomato 37:915

HYDROSIS
Bacterium tardicrescens, iris 28:643
Watersoaking, tobacco 31:959

HYMENIUM
Pellicularia filamentosa 35:742
Pellicularia rolfsii 37:68

HYPERPLASIA
Taphrina robinsoniana, Alnus incana 28:920
Knobiness, sweet potato root 23:92
Viruses
Cherry yellows, cherry 33:452, 453
Potato giant hill, potato 24: 579

HYPOPLASIA
Viruses
Apricot-plum virus (internode shortening), apricot 31:327
Peach mosaic (internode shortening), peach 31:324

INFECTION CHARTS
Bacteria
Correlation between stomatal behavior and infection with Xanthomonas phaseoli var. sojense, soybean 36:386
Fungi
Distribution of Chalara quercina with the oak 37:741

INFECTION CUSHIONS
Rhizoctonia solani 26:987

INFLORESCENCE
Albugo occidentalis, spinach 29:618
Endothia parasitica, chestnut 5:234
Polyporus schweinitzii, Pinus strobus 27:1130, 1133
Viruses
Citrus psorosis A virus, citrus 33:841
Sugar-beet curly top, sugar-beet 18:690
Miscellaneous
Boron deficiency, olive 38:936
Enlarged lenticels, apple 22:182
Measles, apple 14:314; 35:872
On Eucalyptus cornuta 23:282
Hieracium venosum 25:284
Manihot spp. 2:131
Thurberia thespesioides 23 282, 284

KNOT (See: Tumefaction)

LESIONS
Root
Actinomyces ipomoea, sweet potato 30:914
Anguillulina pratensis, apple 26:1129
Armillaria mellea, orange 36: 307
Clitocybe tabescens, grapefruit 38:52
Coniothyrium fuckelii, strawberry 21:1043, 1047, 1054
Corticium vagum, potato 7:211
Erwinia sp., guayule 37:273
Fusarium orthoceras f. gladioli 34:267
Hainesia lythri, strawberry 21: 1041
Nematode species, wheat 38:523
Phytomonas carotae, carrot 34: 417, 418
Pratylenchus pratensis, tobacco 38:532, 533
Pratylenchus pratensis plus Rhizoctonia bataicola, tobacco 38:533
Pratylenchus sp., corn 35:936
Pratylenchus Solidago leavenworthii 35:936
Pythium aphanidermatum, watermelon 29:625
Pythium ultimum, guayule 35:637

Rhizoctonia solani, alfalfa 35:
Rhizoctonia solani, red clover
Rhizoctonia solani, sweet clo-
ver 35:835
Rhizoctonia solani, sugar-beet
31:55
Thielaviopsis basicola, cotton
Ulocladium brachyurus, cowpea
Ulocladium botrytarum, pineapple
Cortic.um solani, bean 35:382
Cortic.um solani, potato 36:385
Diaporthe phaseolorum var. sojae,
bean 37:446
Diaporthe phaseolorum var. sojae,
cowpea 37:446
Diaporthe phaseolorum var. sojae,
lima bean 37:445
Diaporthe phaseolorum var. sojae,
peanut 37:446
Diaporthe phaseolorum var. sojae,
soybean 37:446
Erwinia carotovora, cactus 32:
141
Erwinia sp., guayule 37:273
Erysiphe cichoracearum, canta-
loupe 38:
Glococporium sp., tobacco 35:529
Glomerella cingulata, lespedeza
36:525, 527
Glomerella rubicola, raspberry
25:92, 99
Helminthosporium saccheri Napier
grass 32:49
Helminthosporium vignae, cowpea
35:8
Leptothyrium coniothyrium rose
19:1125
Macrosporium sp., tomato 10:2
Marmor fiaropomaeum, bean 40:55
Pestalotia pezizoides, Vitis
vinifera 19:199
Phoma medicaginis, alfalfa 26:
Phyllosticta straminella, rhu-
barb 24:
Phyllosticta sp., grapevine
10:235
Phytomonas corylina, filbert
30:729
corylina, walnut
726, 727
30:729
Phytomonas juglandis, walnut
30:726, 727
Phytomonas malvacearum, cotton
32:85, 86
Rhabdospora sp., Cavendish
arrowroot 30:777, 778

LESIONS (Cont'd.)
Stem (cont'd.)
Rhizoctonia solani, celery 39: 471, 472
Rhizoctonia sp., apple 35:256
Sclerotinia libertiana, tomato 28:226
Sclerotium rolfsii, wheat 8:65
Septoria albopunctata, blueberry 37:489
Sphaceloma lippiae, Lippia lanceolata 29:655
Streptomyces scabies, potato 40:466, 468, 471, 474
Virus
Citrus quick decline, citrus 41:788

LICHEN
On citrus 6:36

LOSSES (Due to Disease)
Actinomyces ipomoea, sweet potato 30:915
Alternaria ricini, castor bean 39:136
Aphanomyces cochlioides, sugarbeet 34:485, 809
Fusarium oxysporum f. lycopersici plus Heterodera marioni, tomato 31:750
Fusarium sp., potato 30:182
Heterodera marioni plus Fusarium oxysporum f. lycopersici, tomato 31:750
Hypoxylon pruinatum, poplar 35:75
Nematodes, barley 38:521
Nematodes, small grains 38:520
Nematodes, wheat 38:520
Peronospora tabacina, tobacco 25: 635
Pratylenchus pratensis, tobacco 38:823
Puccinia graminis tritici, wheat 38:165
Viruses
Aster yellows, aster 32:804
Bean mosaic, bean 20:473
Potato leaf-roll, potato 8:512
Raspberry decline, raspberry 33:158, 159
Southern celery mosaic, celery 25:298
Southern celery mosaic, corn 25:300

LOSSES (Due to Disease) (Cont'd.)
Viruses (cont'd.)
Southern celery mosaic, squash 25:297
Tobacco ring-spot, tobacco 31: 527

LOSSES IN CHART FORM
Peach brown rot 23:978
Sweet potato storage rots 23:981
Wheat bunt 23:976

LOSSES, AERIAL PHOTOS REVEAL
Heterodera marioni, pineapple 25: 71, 78
Mealy bug, pineapple 23:208
Phymatotrichum omnivorum, cotton 19:1027; 24:553

MANUSCRIPT PREPARATION
Line, letters and dots in relation to reduction for printing 36: 957

MICROSCLEROTIA
Dematium pullulans 28:807

MILDEW (Aerolate)
Mycosphaerella areola, cotton 22: 231

MILDEW (Downy)
Peronospora parasitica, Lepidium virginicum 2:203
Peronospora spinaciae, spinach 40:67
Selerospora graminicola, Setaria viridis 20:994
MILDEW (Frosty)Cercosporella persicae, peach 27:691
MILDEW (Powdery)
Erysiphe cichoracearum, cantaloupe 32:898,997
Erysiphe cichoracearum, cucumber 18:855; 38:1026
Erysiphe cichoracearum, lettuce 31:536
Erysiphe cichoracearum, squash 20:360
Erysiphe cichoracearum, sunflower 2:203
Erysiphe graminis, barley 24:739; 41:625
Erysiphe graminis, wheat 24:1046
Erysiphe graminis hordei, barley 27:54, 59

...ea 26:1136
...ea, 30:73
...ea potato 26:592
...ea sp., hemicloaeum pluty... 35:792
...ea tergitarum, cherry 34:168
...ea oxyacantha, cherry 37:...
...ea, raspberry 23:...
...ea 790
...ea parasitica, peach 40:28...
...ea persicum, rose 29:299
...ea
...ea, cherry 3:287, 289
...identified fungus, wood 20 577
...
...(Chlorosis)
...
...
...oxyacantha, sweet potato ...
...
...sp., numerous 33:1091
...sterilia, lime 3:47
...parasitica, peach ...
...
...fructicola, prune 31:...
...
...lana, cherry 31:781
...
...lana, peach 31:825
...
...sweet cherry bacterium, cherry 31:331
...
...
...ceae, raspberry 20:75
...ella pallens 19:670; 41:675
...ria radicola 8:210
...ycon tabescens 30:43, 49
...ella velutipes 17:492, 398
...ceps praecocissima 8:615, 616
...sporium radicola 8:218
...ceae, peach 20:65
...ea lenticula 31:178; 39:429
...ceae, peach 7:427, 33:375
...
...
...ceae, 12:93, 97
Ganoderma lucidum 25:167, 169
Ganoderma pulverulentum 17:140
...
Lentinus lepideus 19:706
Naematelia trifolii 15:116
Nauemoria cerealis 28:856
Pholiota dura 38:78
Pholiota praecox 28:78
Pleurotus ostreatus 11:392, 397
Polyporus caloceneus 19:729
Polyporus berkeleyi 8:104
Polyporus schweinitzii 7:427
Polyporus sulphureus 33:974
Polyporus subcartilagineus 33:991
Polyporus velutiferus 35:281
Polyporus versicolor 30:957; 35:974
Polystictus versicolor 8:118; 10:471
Poria micropora 35:218
Poria obliqua 37:189
Pseudotrametes praerupta 40:794
Russellinia sp. 4:72
Sparassis radicata 7:163, 170
Stereum murrayi 31:34
Stereum purpureum 1:178
Thelephora terrestris 37:581
Thelephora sp. 11:142
Trametes suaveolens 33:...
Ustulina zonata 17:144, 146
...
...FUNGI
Alternaria tenuis 30:...
Armillaria mellea 36:...
Botrytis cinerea 38:...
Dematophora necatrix 3:159
Hypoxylon pruinatum 35:...
Merulius lacrymans 12:...
Necpeck & Coulter 3:...
...
Phytophthora cactorum 22:...
Sporonema radicata 7:175
...
...(Macrosporium)
Alternaria sp. 26:532, 534
Agaricus campestris 29:732
Botrytomyia fuckeliana 38:448
Botrytis cinerea 31:441; 40:209
Botrytis gladiolorum 36:...
Botrytis sp. 5:299
Tetraloniorium dombeyi 40:...
Thyrsophora cerebriformis 29:...

MYCELIUM (Macroscopic) (Cont'd.)
Clitocybe tabescens 31:94; 32:483
Corticium areolatum 30:121, 124, 125
Corticium galactinum 30:144
Corticium koleroga 23:875, 877
Corticium laetum 1:16
Corticium microsclerotia 29:564, 570, 573
Dematium pullulans 24:807, 827
Erysiphe cichoracearum 32:415, 416, 883
Erysiphe graminis 24:739, 1046
Fusarium moniliforme 31:159
Fusarium nivale 24:199, 203
Fusarium oxysporum 30:182
Glomerella gossypii 31:159
Mycogone perniciosa 20:78
Ozonium texanum 24:530
Pellicularia filamentosa 35:742
Peronospora viciae 24:1359
Phymatotrichum omnivorum 23:677
Phytophthora infestans 6:285
Phytophthora omnivora 16:724
Phytophthora terrestris 7:120
Pseudobalsamia microspora 34:377
Pseudofumago sp. 19:1123
Pythium aphanidermatum 16:50
Pythium myriotylum 33:262, 264, 266
Rhizoctonia carotae 38:441, 442
Rhizoctonia oryzae 28:238
Rhizoctonia solani 22:831; 29:793; 32:906
Rhizoctonia zeae 24:1291
Rhizopus nigricans 27:797
Rhizopus sp. 8:580
Sclerotinia americana 15:539
Sclerotinia cinerea 15:539
Sclerotinia intermedia 31:444
Sclerotinia libertiana 6:269, 271, 437, 438
Sclerotinia ricini 9:568
Sclerotinia sclerotiorum 21:409; 26:186; 38:442
Sclerotium cepivorum 38:379
Sclerotium delphinii 38:84
Sclerotium rolfsii 17:438; 21:1132, 1133, 1192; 22:375; 31:945; 36: 239
Spicaria heliothis 28:893
Verticillium albo-atrum 23:120
Xylaria longeana 32:92

MYCELIUM (Microscopic)
Alternaria sp. 4:330
Corticium vagum var. solani 4:205
Endoconidiophora virescens 34:1075
Fusarium lycopersici 14:575, 576, 577, 578, 579
Fusarium oxysporum 38:766
Fusarium sp. 6:338
Microascus trigonosporus 38:969
Phyllosticta antirrhini 9:318
Phytophthora cinnamomi 35:167
Poria cocos 35:96
Pythium myriotylum 33:268
Rhizoctonia carotae 38:442
Rhizoctonia crocorum 6:358
Rhizoctonia microsclerotia 7:113
Scirrhia acicola 40:727
Sclerotium rolfsii 33:616
Mycelia Sterilia 8:48; 41:1044, 1045, 1046

MYCORRHIZA
in roots of
Circium drummondii 33:145
Citrus 25:646
Helianthella quinquinerva 33:145
Platanthera chlorantha 36:628
Potentilla gracilis 33:145

NECROSIS
Leaf
Helminthosporium victoriae, oat 39:301
Phytomonas medicaginis var. phaseolicola, bean 16:925
Viruses
Streak, potato 29:921, 922
Top necrosis, potato 21:601
Spotted wilt, tomato 30:309
Plant
Erwinia carnegieana, cactus 39: 1030
Erwinia phytophthora, larkspur 33:807
Helminthosporium sativum, corn 39:1023
Helminthosporium "Z", corn 39:1023
Nematode species, barley 38:521
Nematode species, small grains 38:520
Nematode species, wheat 38:521
Ophiobolus cariceti, wheat 12: 68, 88

Ophiobolus graminis, wheat 30: 907, 909
Peronospora parasitica, cabbage 9: 902, 904
Phytophthora palmivora, Dioscorea bulbifera 37: 377
Rhizoctonia solani, gladiolus 35: 230, 231
Sclerotinia sclerotiorum, Carex arenaria 25: 808
Sclerotium delphinii, Salix alaxica 30: 97
Ustilago striiformis, Kentucky
Insect
[illegible] bug, wheat 20: 907, [illegible]
Virus
[illegible] virus No. 3, Lupinus
[illegible] mosaic, strain No. [illegible], tobacco 27: 95
[illegible]
[illegible]
[illegible] mosaic, potato 40: [illegible], 970, 972
[illegible] virus No. 4, bean 41: [illegible]
[illegible] leaf coarse mottle, lily 34: [illegible]
[illegible] leaf virulent coarse mottle, lily 34: 920
[illegible] mosaic, cucumber 34: [illegible]
[illegible] ring-spot plus cucumber mosaic, tobacco 28: [illegible]
[illegible] tobacco etch, severe strain, Physalis pruviana 32: [illegible]
[illegible]
[illegible] tumor var. [illegible], Cynoscia pedaloides
[illegible]
Virus
[illegible] virus No. 1, bean 40: 95
[illegible] 32: 602, 603
[illegible] virus B, potato 29: [illegible], 47
[illegible] virus C, potato 26: [illegible]
Pop (cont'd.)
Viruses (cont'd.)
potato wild mosaic plus potato virus A, potato 29: [illegible] 45
Vascular
Bacillus amylovorus, pear 6: 202
Bacterium campestre, cabbage 10: 85
Chalara quercina, oak 34: 641
Colletotrichum falcatum, sugarcane 34: 289
Fusarium batatatis, sweet potato [illegible]
Fusarium cubense, banana 9: 390; 16: 386, 388
Fusarium orthoceras f. gladioli, gladiolus 34: 264, 267
Fusarium oxysporum, potato 9: 260
Fusarium oxysporum f. rosae, Rosa typhina 39: 755
Fusarium vasinfectum, [illegible]
Marmor medicaginis var. phaseoli, bean 41: 997
Mycelia Sterilia ("buka" disease), potato 33: 1087
Nematospora coryli, orange 29: 485
Phytomonas optata, sugar beet 36: 550
Phytophthora cinnamomi, strawberry 41: 843
Thecaphora solani, potato 34: 713
Thielaviopsis basicola, [illegible] 32: 753, 759
Thielaviopsis basicola, tobacco 32: 753
Verticillium albo-atrum, avocado 39: 570
Verticillium albo-atrum, [illegible] chrysanthemum 31: [illegible]
Verticillium alboatrum, sugar beet 30: 971
Verticillium dahliae, elm 16: 614
Verticillium dahliae, maple 16: 614
Viruses
Alfalfa mosaic, potato 41: [illegible], 975, 977
Bean stem pit, bean 29: 261

NECROSIS (Cont'd.)
Viruses (cont'd.)
Potato net-necrosis, potato 16:931, 932, 933; 17:556, 557; 30:313
Potato "sprain", potato 16: 712, 714, 722
Potato stem-end browning, potato 36:925
Potato streak, potato 29:923
Potato top necrosis, potato 21:605, 606
Potato yellow-dwarf, potato 13:133
[illegible] internal cork
[illegible]
Apple 9:264
Apple, boron deficiency 30: 150
Beet, boron deficiency 29: 121
Corn 26:966
Potato 8:493; 30:313; 40:900
Potato, psyllid infestation 36:481
Sweet potato 13:146

NEMATODE-CAPTURING FUNGI
Acrostalagmus bastropporus on Plectus parvus 31:776
Acrostalagmus obovatus on a nematode 31:783
Acrostalagmus zeosporus on Panagrolaimus subelongatus 36:214
Cephalosporium balanoides on Acrobeloides butschlii 31:785
Harposporium dicoeracum on Rhabditis sp. 31:798
Harposporium heliscides on Rhabditis sp. 31:783
Harposporium oxycoracum on Rhabditis sp. 31:790
Meria coniospora on Rhabditis sp. 31:790
Nematotonus leiosporus on Plectus parvus 31:776
Nematotonus tylosporus on Eunemanna sp. 31:774
Spicaria coccospora on Plectus parvus 31:788

NEMATODE MORPHOLOGY
Anguillulina dipsaci 37:686
Anguillulina pratensis 26:1130, 1131, 1132
Aphelenchus avenae 26:295

NEMATODE MORPHOLOGY (Cont'd.)
Cephalobolus longicaudatus 24:291
[illegible]
329, 330, 331, 333, 334, 335, 337, 338, [illegible]; 26:414, 415; 27:828, 829; 32: 585; 36:343
Heterodera rostochiensis 36:182, 183, 184, 185
Heterodera schachtii 40:137, 140, 142, 144
Rhabditis sp. 26:198
Tylenchus brachyurus 19:618, 620, 621
Tylenchus tritici 15:31

NON-PARASITIC EFFECTS
Carborundum injury 26:585
Crazy top, corn 29:818
Crazy top, Setaria viridis 29:818
Frenching, tobacco 25:1069
Frost injury, pea 29:189, 190, 191, 192, 193
Frost injury, potato 10:424
Frost injury, tobacco 32:513, 514, 515, 516
Insect injury, Cerese bubalis on apple 14:335
Insect injury, mites on Agaricus 33:1091
Internal browning, watermelon 15: 120
Lightning injury, banana 28:225
Lightning injury, black locust 30: 184
Lightning injury, cabbage 11:97; 27:859, 860
Lightning injury, citrus 8:284
Lightning injury, cotton 5:102; 8: 274; 33:151, 153
Lightning injury, cucumber 8:279
Lightning injury, kale 7:141
Lightning injury, potato 5:102; 8: 272; 21:214
Lightning injury, sugarcane 7:318
Lightning injury, tomato 13:147; 31:1018, 1020, 1021
Measles, apple 14:314; 35:872, 874
Pitting, pear 32:1084
Russetting, apple 20:905
Splash injury, guayule 34:509
Sunburn, melon 21:97
Sunburn, tomato 11:380
Sunburn, tulip 27:732
Tipburn, potato 12:319

...parasitism (Continued)
...ent to soil drying 35:
...
Waterscalding, soybean 35:864
Waterscalding, tobacco 35:1021, 1023
Wandthrow, Pinus sp. 3:10

NUTRITION EFFECTS
Boron deficiency, Glomerella sp. 31:498
Boron deficiency, pear 32:1084
Boron deficiency, sweet potato 36:...
Chlorine deficiency, Phaseolus sp. 31:...
Iron deficiency, pecan 28:...
Manganese deficiency, cotton 28:585, 586
Zinc deficiency, orange 32:572
Unidentified deficiency, fig 31:...

OCCLUSA (Only)
Pythium ...ytis sp. 15:398
Pythium ...ndrum 29:418
Pythium butleri 28:36
Pythium ...alpinophorum 35:808

...s and Oceania)

...
Aplenobactor aeropyri (color) 6:345
Bacillus amylovorus 6:402
Bacterium vasculorum 10:480
Bacterium sp. 25:468
Blastospe paspali 38:557
Cronartium coleosporoides 7:108
Cronartium comandrae 7:107
Diporthe batatatis var. aejas 38:631
Diporthe phaseolarum var. batatatis 38:630
Erwinia amylovora 22:688; 29:149
...
Pseudomonas pisi 17:62...
...
...
Xanthomonas translucens var. ...

...PARASITISM OF ...
...ACK IN NATURE
Cronartium ribic...
sitised by Tuberculariа maxima 25:254

PATHOGEN DEMONSTRATED WITHIN THE HOST
Actinomyces scabies, potato 31:707, 709, 710, 711, 712, 715
Anguillulina dipsaci, garlic 25:1028
Anguillulina dipsaci, parsley 25:1008
Aphelenchoides parietinus, cotton 26:699
Aphelenchoides parietinus, rice 24:925
Aphelenchoides pratensis, apple 36:1132
Aphelenchus avenae, phlox 26:295
Aplenobacter aeropyri, Agropyron smithii 6:390
Bacillus amylovorus, pear 3:5, 14
Bacillus dianthi, sugar-beet 5:342
Bacillus sp., corn 10:493
Bacterium leguminosarum, soybean 18:805
Bacterium radicicola, Lupinus albus 36:626
Bacterium solanacearum, peanut 22:373
Bacterium sp., pepper 12:512, ...ca 20:674
Cephalosporium a...
Cephalosporium gregatum, soybean 38:794
Ceratostomella fimbriata, co... 41:181
Ceratostomella pilifera, Pinus virginiana 11:219
...
...
...

PATHOGEN DEMONSTRATED WITHIN THE HOST (Cont'd.)

Chalaropsis thielavoides, rose 30: 795
Coleosporium crowellii, Pinus flexilis 28:522
Colletotrichum atramentarium, potato 16:28
Colletotrichum falcatum, sugarcane 34:830, 833, 834, 835
Colletotrichum lilii, lily 34:558
Colletotrichum phomoides, tomato 38:240
Colletotrichum pisi, pea 11:500
Colletotrichum truncatum, soybean 41:977, 981, 982
Corticium areolatum, orange 30: 124, 128
Corticium koleroga, citrus 17:709
Corticium koleroga, coffee 23:879, 882
Corticium vagum var. solani, potato 5:62
Coryneum microstictum var. staphyleae, Staphylea trifolia 21:1164

Cronartium comptoniae, pine 19:742
Cronartium quercum, pine 32:793
Cronartium ribicola, currant 29:34
Cronartium strobilinum, Pinus palustris 12:122
Cunninghamella meineckella, pine 31:1073
Cycloconium oleaginum, olive 39: 406, 408
Dematium pullulans, Pinus resinosa 28:807
Didymella applanata, raspberry 21:256, 277, 279
Diplodia natalensis, onion 36:247
Ditylenchus dipsaci, Hypochaeris radicata 30:51
Ditylenchus dipsaci, onion 33:62, 63
Ditylenchus dipsaci var. amsinckiae, Amsinckia intermedia 30:46, 48, 50
Elsinoe dolichi, Dolichos lablab 35:344
Endoconidiophora virescens, maple 34:1073
Erwinia carnegieana, cactus 32: 308, 309
Erwinia carotovora, potato 37:237

PATHOGEN DEMONSTRATED WITHIN THE HOST (Cont'd.)

Erwinia sp., guayule 37:275
Erysiphe graminis, barley 18:903
Exobasidium parvifolii, Vaccinium sp. 17:216
Fomes applanatus, Acer saccharum 28:604
Fomes applanatus, Populus canadensis var. eugenie 28:604
Fomes igniarius, Populus canadensis var. eugenie 28:604
Fusarium avenaceum var. fabae, broad bean 38:338
Fusarium bulbigenum var. lycopersici, tomato 34:44
Fusarium conglutinans var. callistephi, aster 27:741, 742, 743
Fusarium moniliforme, cotton 33: 669
Fusarium nivale, grass 24:204
Fusarium orthoceras var. gladioli, gladiolus 34:268
Fusarium oxysporum, Cereus schottii 24:501
Fusarium vasinfectum, cotton 17:756
Fusicladium pisicola, pea 16:558
Geotrichum sp., Pinus sp. 30:532
Gibberella saubinetti, wheat 11: 122, 124
Gloeocercospora sorghi, sorghum 33:223
Gloeosporium piperatum, pepper 16: 345
Glomerella gossypii, cotton 33:669, 670, 671
Hapalosphaeria deformans, dewberry 33:138
Heterodera marioni, cowpea 31:643, 644
Heterodera marioni, Echinochloa crus-galli 24:921
Heterodera marioni, Lycopersicon peruvianum 40:217
Heterodera marioni, Portulaca grandiflora 32:585, 586
Heterodera marioni, purslane 31: 637
Heterodera marioni, rice 24:922, 923, 939, 940
Heterodera marioni, tomato 4:236; 24:918; 26:7; 40:217
Lasiosphaeria pezizula, persimmon 11:215, 224

[illegible] avenaria, oat 12:470
[illegible] [illegible], tomato 15:119
[illegible]sporium [illegible], flax 26:187
[illegible]nospora [illegible], Eleusine coracana 37:[illegible]
[illegible] graminis tritici, wheat 33:[illegible]
Microstroma juglandis var. [illegible]tum, pecan 7:48
Mycosphaerella cerasella, cherry 20:320
Mycosphaerella [illegible], [illegible] berry 31:229, [illegible]
Nematodes, rice 24:[illegible]
Nematodes, wheat 36:[illegible]
Ophiobolus caricetti, cereals 12:[illegible]
Penicillium sp., citrus 20:[illegible]
Peridermium sp., Pinus sylvestris 25:828; 27:47, 48, 4[illegible]
Peronospora effusa, spinach 24:1022, 1023
Peronospora parasitica, cabbage 10:[illegible]
Phoma terrestria, corn 33:527
Phoma terrestria, onion 31:908, [illegible]
Phyllosticta antirrhini, snapdragon 10:243, 247
Phyllosticta solitaria, apple 22:35[illegible]
Phyllosticta sp., pea 14:559, 562; [illegible]
Physalospora [illegible]
Physarotrichum omnivorum, cotton 28:196
Physarotrichum omnivorum, watermelon 25:565, 567, 569
Physoderma graminis, Agropyron repens [illegible]
Phytobacter lycopersicum, tomato [illegible]
Phytomonas insidiosa, corn 28:479
Phytomonas pruni, peach 23:789; [illegible]
Phytomonas tumefaciens, Rubus procumbens 37:[illegible]
Phytomonas washingtoniae, Washingtonia filifera 34:[illegible]
Phytophthora cactorum, Fragaria sp. 26:563
Phytophthora capsici, tomato 34:[illegible]
Phytophthora paeoniae, peony 18:[illegible]
[illegible] [illegible] [illegible] [

PATHOGEN DEMONSTRATED WITHIN [illegible]
(Cont'd.)
[illegible]
Rhizoctonia solani, pepper 37:914
Rhizoctonia solani, potato 27:760; 32:729
Rhizoctonia solani, wheat [illegible]
Rhizopus sp., corn 10:537
[illegible]
spp. 28:849
[illegible]
[illegible]
Sclerotium fulvum [illegible] rotium) 27:1115
Sclerotium gladioli, gladiolus 18: 522
Sclerotium rolfsii, soybean 17:441, 442
Septoria nodorum, wheat 12:545, 585
Septoria tritici, wheat 12:585
Sphaceloma sp., Hesperethusa crenulata 26:72
Sphaceloma sp., Mentha spp. 28:107
Sporocybe azaleae, azalea 29:518; 30:508
Sporotrichum malorum, apple 19:452
Stegonospora curtisii, narcissus 23:777, 780
[illegible]
[illegible]
Taphrina deformans, peach 25:54; 34:[illegible]
Thecaphora solani, potato 34:712
Thielaviopsis basicola, cotton 32: 756
Torula ligniperda, Liriodendron tulipifera 12:374
Tilletia caries, wheat 22:663
Tilletia tritici, wheat 20:642, 644, 648, 650
Trichoderma koningi, sweet potato 1:183
Tylenchus brachyurus, cowpea 19: [illegible]
Tylenchus brachyurus, pineapple 19:625, 626
Tylenchus pratensis, rice 24:925
Tylenchus similis, canna 21:318, 321
Urocystis occulta, rye 30:931, 932
Ustilago striaeformis, red top 14: 266
Ustilago striaeformis, timothy 14: 266

PATHOGEN DEMONSTRATED WITHIN [illegible]
(Cont'd.)
Ustilago zeae, corn 19:442
Venturia inaequalis, apple 18:382, 383, 418
Xanthomonas malvacearum, cotton 41:506

PATHOGEN DEMONSTRATED ON THE HOST
Bacterium angulatum, wheat 34:171
Bacterium tabacum, wheat 34:171

PATHOGENESIS
Accumulation of starch due to blockage of movement by crown gall 12:270
Comparative growth of pineapple plants diseased with Heterodera marioni, and healthy plants 24: 277, 279
Lack of starch movement in virus-diseased plant 10:44, 45
Tilletia levis, size and shape of bunt balls 26:356
Tilletia levis, wheat spike elongation 26:253
Tilletia tritici, size and shape of bunt balls 26:353
Tilletia tritici, wheat spike elongation 26:356

PATHOGENICITY DEMONSTRATED
[illegible]
Alternaria compacta, castor bean 34:226, 227
Aphanomyces cochlioides, sugar-beet 34:494
Bacillus amylovorus, apple 3:276
Ceratostomella fimbriata, sweet potato 31:1126, 1128
Ceratostomella radicicola, date palm 39:558
Cercospora kikuchii, soybean 41: 307
Chalaropsis thielavioides, rose 36:282
Colletotrichum lagenarium, melon 37:592
Colletotrichum lilii, lily 34:562
Colletotrichum lindemuthianum bean 37:405
Colletotrichum phomoides, eggplant 38:255
Colletotrichum phomoides, pepper 38:295

Colletotrichum phomoides, tomato 38:356
Colletotrichum villosum, vetch 35: 992
Corticium microsclerotia, beet 29: 570
Corticium microsclerotia, cabbage 29:570
Corticium microsclerotia, canta- loupe 29:570
Corticium microsclerotia, carrot 29:570
Corticium microsclerotia, eggplant 29:570
Corticium microsclerotia, pepper 29:570
Corticium microsclerotia, tomato [illegible]
Cunninghamella meineckella, pine 31:1073
Endoconidiophora virescens, maple 34:1092
Erwinia carnegieana, cactus 39: 1037
Erwinia carotovora f. parthenii, guayule 37:299
Fusarium cubense, banana 9:390
Fusarium cubense, cotton 9:371, 372
Fusarium culmorum, wheat 39:365
Fusarium eumartii, potato 6:322
Fusarium flocciferum, wheat 39: 365
Fusarium gramineum, wheat 39:365
Fusarium lini, flax 27:534, 543
Fusarium orthoceras var. gladioli, crocus 35:924
Fusarium orthoceras var. gladioli, [illegible]
Fusarium orthoceras var. gladioli, Iris 35:925
Fusarium oxysporum, flax 37:468, 470
Fusarium oxysporum f. batatas, sweet potato 39:882
Fusarium oxysporum f. delphinii, delphinium 39:916
Fusarium oxysporum f. pisi, race 2, pea 39:774
Fusarium oxysporum f. rhois, Rhus typhina 39:757
Fusarium perniciosum, mimosa 31: 603
Fusarium solani f. martii, pea 37: 855; 40:672
Fusarium sublunatum var. elongatum, wheat 39:365
Fusarium zonatum f. 1, onion 27: 768, 769
Fusarium sp., sweet potato 41:229
Glomerella cingulata, Chamaecrista procumbens 34:1083
Glomerella cingulata, lespedeza 36:526
Glomerella cingulata, peach 41:448
Glomerella gossypii, cotton 28:793
Helminthosporium sativum, Agropyron cristatum 39:111
Helminthosporium sativum, flax 27: 534, 543
Helminthosporium sativum, oat 30: 1030
Helminthosporium sativum, race 2, corn 39:1023
Helminthosporium sativum, race 7, corn 39:1023
Helminthosporium victoriae, oat 37:792, 794
Helminthosporium "Z," corn 39:1023
Helminthosporium spp., flax 27:534
Penicillium sp., soybean 35:145
Phoma lingam, cabbage 8:396
Phoma terrestris, onion 27:768, 769
Phymatotrichum omnivorum, cotton 31:359
Physalospora cydoniae, apple 3:294
Phytomonas stewartii, corn 28:780
Phytophthora capsici, squash 30: 974
Phytophthora cinnamomi, cinchona 41:760
Phytophthora erythroseptica, Zantedeschia rehmannii 37:384
Phytophthora palmivora, Dieffenbachia picta 37:871
Phytophthora parasitica, cinchona 41:644
Phytophthora terrestria, tomato 7:120
Polyporus schweinitzii, Pinus strobus 27:1130
Pseudomonas lachrymans, melon 36: 944
Pseudomonas ribicola, Ribes sureum 35:1012
Puccinia coronata, oat 37:412
Pythiacystis citrophthora, pear [illegible]

PATHOGENICITY DEMONSTRATED (Cont'd.)
Pythium deberyanum, Agropyron cristatum 39:111
Pythium graminicolum, Agropyron cristatum 39:111
Pythium splendens, Aglaonema simplex 39:169
Pythium splendens, lily 39:169
Rhizoctonia solani, bean 34:1051, 1066
Rhizoctonia solani, pea 35:835; 37:655
Rhizoctonia solani, potato 31:54
Rhizoctonia solani, soybean 40: 822, 824
Rhizoctonia solani, strawberry 35: 712
Rhizoctonia solani, sugar-beet 29: 273
Rhizoctonia zeae, corn 24:1293
Rhizoctonia spp., flax 30:757
Rhizopus nigricans, sweet potato 4:320
Sclerotinia fructicola, cherry 29: 342
Sclerotinia laxa, cherry 29:342
Sclerotinia trifoliorum, clover 39: 162
Sclerotinia trifoliorum, Trifolium glomeratum 39:164
Sclerotinia trifoliorum, Trifolium hybridum 39:164
Sphaeronema fimbriatum, sweet potato 3:166
Streptomyces scabies, pea 39:445
Streptomyces scabies, potato 40: 456
Streptomyces scabies, radish 39: 445
Streptomyces scabies, soybean 39: 445, 449
Thielavia basicola, tobacco 6:168
Verticillium albo-atrum, avocado 39:686
Verticillium albo-atrum, Helichrysum bracteatum 31:1133
Verticillium albo-atrum, pepper 29: 350
Verticillium albo-atrum, sugar-beet 30:772
Verticillium albo-atrum, tomato 41: 987
Xylaria longeana, Ginkgo biloba 32: 81

PATHOGENICITY DEMONSTRATED (Cont'd.)
Insects
Mealy bug, pineapple 38:647
Viruses
Lily coarse mottle, lily 34:723
Lily virulent coarse mottle, lily 34:723
Peach mosaic, peach 31:331
Potato mosaic, potato 8:494
Sugar-beet curly top, buckwheat 9:421
Sugar-beet curly top, Chenopodium album 9:418
Sugar-beet curly top, Erodium cicutarium 9:415
Sugar-beet curly top, Medicago hispida 9:417
Sugar-beet curly top, Stellaria media 9:420
Sugar-beet curly top, Urtica urens 9:419
Sugarcane mosaic, corn 41:760
Tobacco mosaic, petunia 6:334
Tobacco mosaic, tomato 6:333

PATHOLOGICAL HISTOLOGY
Actinomyces chromogenus, beet 5: 32, 33
Actinomyces scabies, potato 3:257, 258, 260, 262, 263; 31:705
Alternaria solani, potato 18:740
Alternaria solani, tomato 34:342
Alternaria tenuis, tomato 34:342
Alternaria sp., tomato 26:534
Aplanobacter agropyri, Agropyron smithii 6:330
Bacillus carotovorus, potato 20: 226
Bacillus musae, banana 1:48
Bacterium tabacum, tobacco 27:792, 793, 794, 795
Bacterium tumefaciens, Cupressus arizonica 23:98
Bacterium tumefaciens, onion 39: 694, 697
Bacterium tumefaciens, Opuntia keyensis 24:932, 933, 934, 935, 936
Cephalosporium diospyri, persimmon 40:308
Ceratostomella radicicola, palm 31:1125
Ceratostomella ulmi, elm 30:523; 32:442

PATHOLOGICAL HISTOLOGY (Cont'd.)
Cercospora beticola, beet 18:728, 729
Cercospora carotae, carrot 33:116
Cercospora symplocarpi, Symplocarpus foetidus 18:73
Cercospora thujina, Thuja orientalis 38:186
Cercosporella brassicae, cabbage
Chalara quercina, oak 34:641; 39:
Chalaropsis thielavioides, rose 30:795
Chilonectria cucurbitula, jack pine 37:759
Clitocybe tabescens, orange 38:50, 51, 54
Coccomyces pruniphorae, Prunus domestica 18:724, 725
Colletotrichum falcatum, sugarcane 34:829, 833, 834, 835
Colletotrichum fragariae, strawberry 21:741
Colletotrichum lilii, lily 34:558
Colletotrichum phomoides, tomato 38:240
Colletotrichum truncatum, soybean 41:982
Collybia velutipes, Lupinus arboreus 11:400
Corticium vagum var. solani, potato 5:62
Corynaeum asperulum, Cupressus sempervirens 36:776
Cronartium ribicola, currant 29: 34
Cronartium ribicola, white pine 41:276
Cunninghamella mainecksella, pine 31:1066, 1073
Cuscuta sp., beet 39:563
Cuscuta sp., cucumber 39:564
Cuscuta sp., squash 39:564
Cuscuta sp., tobacco 39:563, 564
Cuscuta sp., tomato 39:565
Cyclonium oleaginum, olive 39:406, 408
Diplodia natalensis, peanut 22: 375
Ditylenchus dipsaci, onion 33:62, 63
Ditylenchus dipsaci var. amsinckiae, Amsinckia intermedia 30:46, 48, 50
PATHOLOGICAL HISTOLOGY (Cont'd.)
Ditylenchus dipsaci var. amsinckiae, Hypochaeris radicata 30:51
Elsinoe dolichi, Dolichos lablab 35:344
Elsinoe solidaginis, Solidago fistulosa 29:973
Endoconidiophora virescens, maple 34:1070, 1073
Endothia parasitica, chestnut 4: 193, 198
Eocronartium muscicola 8:201, 218
Erwinia carnegieana, cactus 32: 306, 308, 309; 39:1033
Erwinia carotovora, potato 16:176; 37:230, 236, 237
Erwinia sp., guayule 37:273
Fomes applanatus, Acer saccharum 28:604
Fomes applanatus, Populus canadensis var. eugenie 28:604
Fomes ignarius, Ostrya virginiana 39:479
Fomes ignarius, Populus canadensis var. eugenie 28:604
Fomes pinicola, cherry 33:975
Fusarium avenaceum, potato 29:279
Fusarium batatatis, sweet potato 4:282
Fusarium batatis, sweet potato 4: 320
Fusarium conglutinans var. callistephi, aster 27:742, 743
Fusarium cubense, banana 9:355, 390 (color)
Fusarium eumartii, potato 6:324
Fusarium moniliforme, cotton 33: 668
Fusarium moniliforme, sorghum 41: 530
Fusarium orthoceras f. gladioli, gladiolus 34:268
Fusarium oxysporum, Cereus schottii 24:501
Fusarium oxysporum, sweet potato 9:470
Fusarium oxysporum f. batatas, sweet potato 40:770, 772
Fusarium oxysporum f. rhois, Rhus typphina 39:775
Glocodes pomigena, apple 22:947
Glomerella gossypii, cotton 33: 669, 670, 671
Gnomonia dispersa, pecan 26:1027

PATHOLOGICAL HISTOLOGY (Cont'd.)
Guignardia bidwelii, Ampelopsis tricuspidata 18:748
Gymnosporangium juniperi-virginanee, Juniperus sp. 26:800
Hapalosphaeria deformans, dewberry 33:138
Helminthosporium sacchari, Cymbopogon citratus 31:188
Heterodera marioni, Portucaca grandiflora 32:585, 586
Heterodera marioni, tomato 26: 8, 10, 11, 13, 14, 16, 18
Heterosporium tropaeoli, nasturtium 40:556
Leptothyrium pomi, apple 8:239
Macrophoma tumefaciens, Populus macrocarpa 5:184
Melampsora farlowii, Tsuga canadensis 29:464
Microstroma juglandis var. robustum, pecan 7:43
Peridermium sp., Pinus sylvestris 28:29, 37, 47, 48, 49; 25:829
Peronospora parasitica, cabbage 25:956
Phoma poni, quince 2:72
Phoma terrestris, corn 33:527
Phyllosticta solitaria, apple 14: 564, 565, 566, 568
Physalospora tucumanensis, sugarcane 34:207
Physoderma graminis, Agropyron repens 41:1067
Physoderma sp., Agropyron repens 37:887
Phytomonas carotae, carrot 34:418
Phytomonas pruni, peach 23:799
Phytomonas tumefaciens, Rubus procerus 37:614, 615, 616, 617, 618, 620, 621, 622
Phytomonas tumefaciens, sunflower 37:202, 205
Phytophthora cactorum, snapdragon 24:416
Phytophthora cactorum, Viscaria sp. 29:653
Phytophthora capsici, tomato 34: 814, 816
Phytophthora cinnamomi, chestnut 35:164
Phytophthora erythroseptica, calla 40:713
Phytophthora palmivora, Dieffenbachia picta 37:870

PATHOLOGICAL HISTOLOGY (Cont'd.)
Pleurotus ostreatus, Lupinus arboreus 11:400
Polyporus berkeleyi, cherry 33:974
Polyporus paragamenus, Liquidambar sp. 26:64
Polyporus schweinitzii, lupine 38: 374
Polyporus spraguei, cherry 33:974
Poria inflata, cherry 33:971
Poria mutans, cherry 33:971
Poria obliqua, beech 37:189
Poria prunicola, cherry 33:970
Pseudomonas campestris, cabbage 9: 277, 278, 279, 280
Pseudomonas lachrymans, cucumber 41:1062
Pseudomonas lachrymans, melon 36: 944
Pseudomonas tumefaciens, sunflower 31:139, 142, 145
Puccinia coronata, oat 34:31, 33, 34, 35, 36, 37
Puccinia graminis tritci, wheat 1: 151, 154; 25:1049, 1052; 33:487
Ramularia areola, cotton 22:232
Ramularia destructans, ginseng 8: 561
Ramularia panacicola, ginseng 8:561
Ramularia primulae, Primula polyantha 18:739
Ramulispora sorghi, sorghum 36:193, 194, 195
Rhizoctonia microsclerotia, fig 7: 118
Rhizoctonia solani, potato 32:729
Rhizoctonia solani, soybean 40:826
Sclerospora sorghi, sorghum 22:578
Septoria petroselini, celery 18: 732
Sphaceloma fawcettii scabiosa, citrus 18:543, 544; 26:196
Sphaceloma sp., Mentha spp. 28:106, 107
Sphaeropsis sp., oak 28:404
Streptomyces scabies, potato 40: 468
Streptomyces scabies, wheat 39:453
Taphrina deformans, peach 34:979
Thecaphora solani, potato 34:712
Viruses
Apricot mosaic, apricot 32:180
Avocado sunblotch, avocado 24: 616
Bean mosaic, bean 40:76

PATHOLOGICAL HISTOLOGY (Cont'd.)
Viruses (cont'd.)
Bean virus 4, bean 41:869
Bean (Azuki) mosaic, Azuki bean 12:396
Citrus blind-pocket psorosis, citrus 33:858
Citrus concave-gum psorosis, citrus 33:853
Citrus psorosis, graft-studies citrus 37:151
Citrus psorosis A, citrus 33: 843, 844, 866, 867, 868, 870, 876, 877
Citrus psorosis B, citrus 33: 843
Citrus scaly bark, citrus 24: 616
Elm phloem necrosis, elm 34: 820, 822, 824
Gladiolus broken-petal, gladiolus 24:614
Hemerocallis mosaic, Hemerocallis sp. 24:607
Iris mosaic, Iris tectorum 24: 608
Iris mosaic, Iris tingitana 24: 609, 610, 611, 612
Peach buckskin, cherry 35:629
Peach buckskin, peach 31:923; 35:613, 614, 616, 617, 620, 622, 624
Potato leaf roll, potato 21:596
Potato net necrosis, potato 16: 934
Potato purple-top wilt, potato 29:277
Potato rugose mosaic, potato 21:599
Potato top necrosis, potato 21: 597, 599
Strawberry dwarf, strawberry [illegible]
Sugar-beet curly-top, beet 5: 105, 342; 23:687, 688, 690, 692, 693, 697, 701, 705; 24:304
Sugar-beet curly-top, tomato 24:1116, 1117
Sweet potato internal cork, sweet potato 36:20
Tobacco kroepoek, tobacco 23: 179, 180, 181, 182, 185, 186
Tobacco kroepoek, zinnia 23:187
Tobacco mosaic, tobacco 24:600, 602, 604, 605, 606, 613, 615
Tobacco mosaic, tomato 15:762; 17:379
Tobacco yellow mosaic, mutant strain BSY, tobacco 35:554
Tomato big-bud, tomato 23:649; 25:543, 544, 545, 547, 548, 551, 552, 555: 30:852
Tomato unidentified virus, tomato 41:419
Xanthomonas malvacearum, cotton 41:506
Xanthomonas translucens var. cerealis, barley 36:455
Xylaria polymorpha, Acer rubrum 27:1178
Non-parasitic
Abnormal corn kernel 29:906
Abnormal cassava 2:134
Apple, winter injury 6:281
Chrysanthemum, cracking of stem 9:534
Corn, black bundle of stem 26: 966
Hypertrophy of pea following introduction of fungus filtrate 21:921
Oedema, Manihot sp. 2:134
Orange, zinc deficiency 32:574, 575, 576
Potato, hollow heart 29:281
Potato, psyllid feeding 36:481
Sunflower, boron and zinc deficiency 32:577

PERITHECIA
Adelopus gaumanni 30:654
Calonectria graminicola 3:242
Ceratostomella fimbriata 39:549, 553; 41:181
Chilonectria curcurbitula 37:759
Claviceps purpurea 1:52
Claviceps yanagawaensis 32:810
Cryptodiaporthe castanea 28:695
Cryptosporella viticola 1:118
Diaporthe arctii 21:78, 79
Diaporthe crotalariae 23:599, 603
Diaporthe juglandis 13:421
Diaporthe phaseolarum var. batatatis 38:630, 631; 41:331

PERITHECIA (Cont'd.)
Diaporthe phaseolorum var. sojae 37:445; 38:629, 651
Diaporthe vaccinii 30:442
Diaporthe vexans 32:540
Didymella applanata 21:252, 256, 257
Didymellina iridis 10:155
Didymosphaeria oregonensis 21:914
Elsinoe ampelina 19:676
Elsinoe canavallae 19:677
Elsinoe solidaginis 29:973
Endothia parasitica 4:260
Erostrotheca ledi 21:966, 968, 969
Erostrotheca multiformis 18:845
Erysiphe cichoraceārum 31:537; 32:416
Erysiphe graminis 24:739
Erysiphe lagerstromiae 23:818
Erysiphe sp. 33:746
Gibberella fujikuroi var. subglutinans 26:687
Gibellina cerealis 24:947
Glomerella piperata 16:345
Glomerella sp. 16:345
Gnomonia dispora 26:1027
Gnomonia iliau 3:98
Gnomonia sp. 38:701, 702
Guignardia aesculi 6:20
Herpotrichia nigra 3:158
Hypomyces ipomoeae 3:242
Hypoxylon pruinatum 35:75
Lasiosphaeria pezizula 11:215
Leptosphaeria bondari 25:885
Meliola guianensis 13:249, 250
Microascus trigonosporus 38:969
Microsphaeria diffusa 30:621
Mollisia earliana 12:378
Mycosphaerella areola 22:235
Mycosphaerella brassicola 5:263
[illegible] 30:334
[illegible] 1:136, 137
Mycosphaerella fragariae 31:228
Mycosphaerella grossulariae 6:421
Mycosphaerella liguilicola 39:791, 793
Mycosphaerella louisianae 31:228
Mycosphaerella ontariensis 5:8
Mycosphaerella populicola 31:245
Mycosphaerella populorum 31:245
Mycosphaerella solani 3:242
Myriogenospora paspali 24:697
Nectria discophora 3:242

PERITHECIA (Cont'd.)
Nectria galligena 3:242
Nectria sp. 29:355
Neopeckia Coulteri 3:158
Ophiobolus caricati 12:88
Ophiobolus fuligus 24:986
Ophiobolus sp. 24:987
Ophiostoma narcissi 40:494, 495
Otthia amica 5:58
Physalospora corticis 32:1070
Physalospora cydoniae 3:294
Physalospora miyabeana 31:1057
Physalospora tucumanensis 34:207, 208
Physalospora zeicola 23:65
Physalospora sp. 15:340
Plectodiscella pyri 19:677
Plectodiscella veneta 19:677
Pleospora mali 18:572, 575
Pseudobalsamia sp. 20:917
Pseudopeziza ribis 26:120, 142
Rosellinia caryae 12:384
Rosellinia herpotrichioides 27:306
Rosellinia sp. 4:71
Spermoedia sp. 5:192
Sphaeronaemella fragariae 6:266
Sphaerulina rubi 33:993
Sphaerulina trifolii 13:120
Systremma acicola 31:64, 66
Ustulina zonata 17:146
Valsa sordaria 30:462
Venturia inaequalis 18:418; 32:854
Venturia pirina 32:364

PHIALIDES
Beauveria sp. 21:1122

PITTING
Stony pit virus, pear 29:261
[illegible] 32:1064
[illegible] 33:1091

PLANT GROWTH
Effect of Calcium
Philodendron 31:843
Effect of Chemicals
Corn seeds 27:95, 97
Excised tomato roots 32:765, 768
Mimosa cuttings 39:66
Effect of Day Length, rye 31:625
Effect of Copper, beet 26:1110

PLANT GROWTH (Cont'd.)
Effect of Iron, Philodendron 32:845
Effect of Light, Pinus resinosa 35: 506
Effect of Light, Pinus sylvestris 35:506
Effect of Magnesium, Philodendron 31:845
Effect of Manganese, Philodendron 31:845
Effect of Nitrogen, bean 36:616
Effect of Nitrogen, corn 28:216
Effect of Nitrogen, onion 36:298
Effect of Nitrogen, Philodendron 31:845
Effect of Nitrogen, Pinus strobus 27:1130, 1133
Effect of Nitrogen, tobacco 25:183, 185
Effect of Phosphorus, corn 28:218
Effect of Phosphorus, Philodendron 31:845
Effect of Phosphorus, Pinus strobus 27:1130, 1133
Effect of Phosphorus, tobacco 25: 486
Effect of Potassium, corn 28:220
Effect of Potassium, Philodendron 31:845
Effect of Potassium, tobacco 25: 488
Effect of Sulphur, Philodendron 31:845
Effect of Soil Moisture, barley 41:624
Effect of Soil Moisture, sugarcane 27:75
Effect of Soil Moisture, tomato 36:823
Effect of Soil and Air Temperature, barley 24:367; 41:624
Effect of Moisture Content of Seed and Type of Storage of Seed, cotton 36:32
Leaves of Lycopersicon chilense and of F_1 between L. chilense and L. esculentum 29:215
Leaves and fruit of Lycopersicon esculentum x L. peruvianum 39: 382
Production of new growth of Nicotiana tabacum from old root 28:229
Stimulation of growth with picric acid, rye 31:630
Tobacco hybrids 39:286

POWDERY MILDEW (See: Mildew)

PROLEPSIS
Delphinium virus, delphinium 24: 470, 472
Tomato big-bud virus, tomato 23: 643, 644, 645, 647
Grapefruit 6:41

PROLIFERATION
Aster yellows virus, Phlox drummondii 33:742
Peronospora viciae, pea 24:1359
Sphaerotheca reiliana, corn 10: 329
Sugar-beet curly-top virus, flax 35:605
Tomato big-bud virus, tomato 23: 644

PSEUDOSCLEROTIA
Erostrotheca multiformis 18:845

PYCNIA (See: Spermogonia)

PYCNIDIA
Ascochyta imperfecta 32:592, 595; 35:869
Ascochyta lycopersici 6:365
Ascochyta majalis 32:260
Ascochyta piniperda 4:66
Ascochytella pentstemonii 31:196
Atropellis pinicola 20:567
Coccomyces pini 3:130, 132, 133
Coniothyrium fuckelii 1:102; 21: 1055; 30:451
Coniothyrium rosarum 9:410, 411
Coniothyrium sp. 25:885
Cryptodiaporthe castanea 28:695
Cryptosporella viticola 3:21
Cytospora chrysosperma 30:462, 466, 468
Cytospora sp. 11:162, 164
Diaporthe batatatis 2:121
Diaporthe phaseolarum var. sojae 37:446, 451
Dendrophoma obscurans 38:701
Dilophospora alopecuri 15:18, 22
Diplodia delphinii 40:618
Diplodia frumenti 20:734, 735
Diplodia macrospora 20:441
Diplodia natalensis 22:375; 36:246
Diplodia theobromae 36:566
Diplodia zeae 29:68, 69, 70; 30: 980
Dothichiza caroliniana 37:491

PYCNIDIA (Cont'd.)
Dothichiza obscurans 38:701
Endothia parasitica 3:304
Exosporium fawcetti 39:341, 342
Fusicoccum putrefaciens 19:1018
Fusicoccum pyrorum 13:230
Fusicoccum viticolum 1:116, 117
Gloeodes pomigena 22:946, 947
Gloeosporium necator 36:1044
Gloeosporium venetum 36:1044
Gnomonia iliau 3:98
Guignardia aesculi 6:20
Guignardia bidwellii 36:909
Guignardia bidwellii f. muscadinii 36:909
Haplosphaeria deformans 33:138
Lasiodiplodia tubericola 3:166
Macrophoma tumefaciens 5:184
Mycosphaerella brassicola 5:264
Mycosphaerella liguliicola 39:791, 793
Mycosphaerella populicola 31:245
Mycosphaerella populorum 31:245
Ophiobolus fuligus 24:968
Ophiobolus sp. 24:971
Pestalotia macrosticha 20:89
Phoma batatae 2:121
Phoma insidiosa 11:261, 268
Phoma lingam 1:28; 8:407, 408, 409, 413, 414; 39:851, 855; 41:821
Phoma medicaginis 26:1017
Phoma pomi 2:72
Phoma terrestris 19:701; 31:908
Phoma sp. 4:66
Phomopsis citri 2:112
Phomopsis crotalariae 23:599, 603
Phomopsis juniperovora 16:914
Phomopsis pseudotsugae 19:980, 986
Phomopsis sp. 10:980, 986
Phyllosticta antirrhini 9:316, 319, 320, 321; 10:243, 247
Phyllosticta solitaria 14:559, 562
Phyllosticta vaccinii 37:494
Phyllosticta sp. 10:235, 243
Physalospora zeae 36:208
Plenodomus destruens 3:244
Pyrenochaeta terrestris 38:834, 835, 837
Rhizosphaeria kalkoffi 37:599
Selenophoma bromigena 35:238
Septoria albo-punctata 37:489
Septoria apii 22:794
Septoria apii graveolentis 22:794
Septoria avenae 12:451, 470
Septoria brevispora 27:1002

PYCNIDIA (Cont'd.)
Septoria lycopersici 14:156; 25:793; 35:17
Septoria nodorum 12:542, 545
Septoria pisi 3:58
Septoria rubi 27:1002; 33:990, 992
Septoria tritici 12:562, 585; 24:135
Sphaeronema fimbriatum 3:166
Sphaeropsis malorum 2:190
Sporonema oxycocci 34:438
Stagonospora curtisii 23:778, 783
Trichoseptoria fructigena 30:329, 331
Valsa sordaria 30:462, 466
Wojnowicia graminis 25:413

PYCNIOSPORES (See: Spermatia)

RADIOAUTOGRAPHS
Bacterium stewartii, corn 41:799
Puccinia graminis tritici, wheat 36:561

RANGE OF PATHOGEN (See: Distribution of Pathogen)

RASPLEAF
Cherry virus, cherry 33:621

RECEPTIVE BODIES
Sclerotinia gladioli 24:401

RESINOSIS
Cytospora canisia littoralis, Cupressus sempervirens var. stricta 31:898

RETARDATION
Of bud development, Aphelenchoides parietinus 26:699

RHIZOMORPHS
Armillaria mellea 4:322; 10:470; 19:870; 31:804; 36:306, 307; 41:679
Clitocyba tabescens 32:488, 489, 491
Corticium koleroga 17:690, 692, 697, 698
Ozonium texanum 24:529, 531, 532
Xylaria apiculata 31:937

ROSETTING
Marmor laesiofaciens, bean 34:511

ROSETTING (Cont'd.)
Viruses
Blackberry dwarf, blackberry 17:641
Celery virus No. 1, banana 24:1033
Cherry yellows, cherry 39:39
Cherry yellows, peach 32:715, 717; 38:512
Cranberry false blossom, periwinkel 35:814
Lily rosette, lily 34:543, 547; 35:130; 38:850
Peach virus, peach 10:108; 31 563
Peach rosette, cherry 21:379
Peach rosette, peach 26:208
Peach yellows, peach 26:205; 28:493
Peach little peach, peach 26: 205
Prune dwarf, peach 32:749
Rhododendron virus, Rhododendron 10:278
Strawberry witches' broom, strawberry 17:329, 331
Sugarcane Fiji disease, sugarcane 11:334
Tomato rosette, tomato 41:1092
Nematodes, strawberry 10:95
Non-parasitic
Boron (?) deficiency, beet 29: 124
Iron Deficiency, pecan 22:600

Black Rot
Pseudomonas campestris, cabbage 9:276
Blossom End-rot
Apple 16:1011
Pepper 15:225, 226, 227
Tomato 4:374; 8:539; 32:217
Bud Rot
Fusarium pirinum, peach 15:97
Bulb Rot
Aphelenchoides fragariae, narcissus 22:927
Aphelenchoides parietinus, narcissus 22:927
Aspergillus niger, onion 19:734, 735, 736
Cephalobolus striatus, narcissus 22:927
Colletotrichum lilii, lily 34: 557; 37:195

ROT (Cont'd.)
Bulb Rot (cont'd.)
Diplodia natalensis, onion 36: 246
Ditylenchus dipsaci, onion 30: 393
Fusarium vasinfectum v. zonatum, onion 31:912
Fusarium zonatum forma 1, onion 32:770
Fusarium sp., onion 30:393
Paraphelenchus maupasi, hyacinth 24:164
Phoma terrestris, onion 31:909, 912
Rhizoctonia solani, tulip 38: 156
Sclerotium rolfsii, Scilla sibirica 38:84
Tylenchus dipsaci, narcissus 22:927
Butt Rot
Ansatospora macrospora, celery 34:95
Polyporus balsameus, Abies balsamea 19:786
Collar Rot
Phytophthora cactorum, snapdragon 24:416
Various causes, apple 10:467, 468, 471
Waterlogging, apple 38:737
Winter injury, apple 40:356, 357
Corm Rot
Fusarium orthoceras var. gladioli, gladiolus 32:264, 267
Fusarium oxysporum var. gladioli, gladiolus 16:525
Rhizoctonia solani, gladiolus 35:231
Sclerotium gladioli, Fressia sp. 35:925
Sclerotium gladioli, gladiolus 18:529
Yeasts, dasheen 8:548
Cotyledon Rot
Pythium spp., pea 27:584
Rhizoctonia sp., pea 27:584
Crown Rot
Ansatospora macrospora, celery 34:95
Corticium solani, Gazania rigens 39:1053
Phoma betae, beet 20:627, 629

ROT (Cont'd.)
Crown Rot (cont'd.)
Phytophthora parasitica, corn 38:1030
Rhizoctonia sp., carrot 16:366
Ear Rot
Diplodia frumenti, corn 20:734
Diplodia macrospora, corn 20: 440
Diplodia zeae, corn 24:153
Helminthosporium maydis, Race I, corn 31:515
Helminthosporium maydis, Race II, corn 31:515
Helminthosporium turcicum, corn 27:207
Physalospora zeae, corn [illegible]
Physalospora zeicola, corn 23: 65
Rhizoctonia zeae, corn 24:1291, [illegible]
Foot Rot
Fomes sp., sugarcane 17:83, 85, 86, 88, 89
Macrosporium solani, sweet potato 15:239
Non-parasitic
Orange 6:37
Sugarcane 17:62, 64
Fruit Rot
Alternaria citri var. cerasi, orange 7:190
Alternaria crassa, Datura stramonium 7:330
Alternaria sp., apple 18:571
Alternaria sp., tomato 26:532, 533, 544
Amsatospora macrospora, apple 34:95
Aspergillus sclerotiorum, apple 23:507
Bacterium sp., pineapple 16: 360, 362
Botryosphaeria ribis, grape 38: 251
Botrytis cinerea, apple 16:487; 26:707
Botrytis cinerea, lima bean 40: 230
Botrytis sp., apple 26:790, 791
Botrytis sp., cucumber 28:226
Botrytis sp., tomato 10:499; 24: 226
Choanephora cucurbitarum, cowpea [illegible]

ROT (Cont'd.)
Fruit Rot (cont'd.)
Choanephora cucurbitarum, squash 29:900
Colletotrichum lindemuthianum, bean 31:571
Colletotrichum sp., papaya 31: 571
Diaporthe phaseolarum var. sojae, okra 37:451
Diaporthe phaseolarum var. sojae, pepper 37:451
Diaporthe phaseolarum var. sojae, tomato 37:451
Erwinia ananas, pineapple 40: [illegible]
Fusarium aroideae, pumpkin 28: 381
Fusarium aroideae, squash 28: 381
Fusarium sclerotium, peach 15: 93, 94
Fusarium javanicum, pumpkin 28: 351
Fusarium javanicum, squash 28: 351
Fusarium pirinum, peach 15:93, 94
Fusarium solani, peach 15:93, 94
Gloeosporium olivarum, olive 32: 643
Glomerella cingulata, apple 25: 98
Glomerella cingulata, fig 21: 1188
Glomerella cingulata, orange 21:1188
Glomerella cingulata, pepper 21: 1188
Glomerella cingulata, persimmon 21:1188
Glomerella cingulata, tomato 21: 1188
Glomerella cingulata, Zizyphus jujuba 21:1188
Glomerella gossypii, cotton 2: 26; 31:165
Glomerella rubicola, apple 25: 98
Glomerella rufomaculans, apple 1:212; 2:160
Glomerella rufomaculans, pear 1:202
Guignardia bidwellii f. muscadinii, grape 36:909

...T (Cont'd.)
...Rot (cont'd.)
...Sporotrichum sp., apple 19:452
...Verticillium albo-atrum, tomato 36:989
Insecta
Clonostachoides, tomato 1:378
Monilinia fructicola, cherry 37:983
Monilinia seaveri, cherry 37: 980
Neocosmospora coryli, tomato 23: [illegible]
Oospora citri-aurantii, lemon 7:38.
Penicillium expansum, apple 26: [illegible]
Penicillium sp., apple 18:571
Phytomonas melophthora, apple 28:562; 24:251
Phytophthora capsici, cucumber 36:974
Phytophthora capsici, pepper 32: 777, 779; 40:747
Phytophthora capsici, tomato 30:974; 35:380
Phytophthora cinnamomi, pine-apple 26:30
Phytophthora infestans, tomato 4:374
Phytophthora parasitica, tomato [illegible]
Phytophthora terrestria, tomato 7:119, 120
Plectospora sp., apple 18:571
Pseudomonas lachrymans, cucumber 43:1061
Pythium acanthicum, watermelon [illegible]
Pythium aphanidermatum, eggplant 16:50
Pythium boliocides, watermelon [illegible]
Pythium oligandrum, cucumber 30:786
Pythium periplocum, watermelon [illegible]
Rhizopus sp., tomato 8:580
Sclerotinia sclerotiorum, almond 28:410
Sclerotinia sclerotiorum, apricot 33:407, 409

...T (Cont'd.)
Wilt Rot (cont'd.)
Sclerotium rolfsii, tomato 8: 580
Sphaeloma symphoricarpi, Symphoricarpus albus var. laevigatus 18:801
Sporotrichum malorum, apple 19: 452
Stemphylium sp., tomato 8:580
Trichosporia fructigena, apple 30:329, 331
Trichothecium roseum, tomato 41:654
Virus
Tomato spotted wilt, pineapple 21:869
Non-parasitic
Blossom-end rot, pepper 40: 747
Blossom-end rot, tomato 4: 374
Ground Rot
Actinomyces scabies, sweet potato 19:190
Cystospora batatas, sweet potato 15:288, 289, 292
Head Rot
Peronospora parasitica, cabbage 25:957
Pythium spp., cabbage 15:486
Heart Rot
Phytopthora cinnamomi, pineapple 24:174
Phytopthora meadii, pineapple 20:991
Sparassis radicata, Pseudotsuga taxifolia 7:174
Rhizoma Rot
Phytopthora erythroseptica, [illegible]
Tylenchus dipsaci, Chiendera lucilia 23:621
Tylenchus dipsaci, Colchium speciosum album 23:621
Tylenchus dipsaci, iris 23:103, 104
Ring Rot
Corynebacterium sepedonicum, potato 36:230
Erwinia carotovora, potato 36: 238
Pythium ultimum, sweet potato 24:308, 310

ROT (Cont'd)
Root Rot
Actinomyces iponoea, sweet potato 30:916
Alternaria radicina, carrot 12:166
Aphanomyces cochlioides, sugar-beet 34:487
Armillaria mellea, apricot 36: 312
Armillaria mellea, geranium 36:313
Armillaria mellea, orange 36: 307
Armillaria mellea, peach 36: 312
Armillaria mellea, pepper-tree 36:314
Bacterium solanacearum, peanut 22:375
Ceratostomella radicicola, palm 31:1125
Colletotrichum higginsiana, turnip 25:271
Corticium galactinum, apple 30:144, 147
Corticium henriensis, apple 30: 144
Corticium solani, sugar-beet 35:366
Ditylenchus destructor, sugar-beet 41:873
Fusarium batatatis, sweet potato 4:306
Fusarium coeruleum, pea 28:435
Fusarium cromyphthoron, onion 19:255
Fusarium dimerum, beet 26:554
Fusarium martii var. phaseoli, peanut 22:373
Fusarium moniliforme, cotton 17:233; 33:667
Fusarium orthoceras, beet 26: 554, 557
Fusarium oxysporum, sweet potato 9:470
Fusarium oxysporum f. batatas, sweet potato 39:881
Fusarium solani f. martii, bean 40:678
Fusarium vectricosum, beet 26: 554
Fusarium sp., sugar-beet 18: 939, 940

ROT (Cont'd.)
Root Rot (cont'd.)
Fusarium sp., sweet potato 41: 228, 229
Ganoderma lucidum, cocoanut 26: 156
Gliocladium aureum, carrot 38: 447
Glomerella gossypii, cotton 33: 667
Helminthosporium app., flax 27: 541
Lasiodiplodia tubericola, sweet potato 3:166
Macrosporium herculeum, turnip 25:269
Phoma betae, sugar-beet 18:939, 940; 21:294; 26:557, 559; 38:344
Phoma terrestris, onion 19:697
Phymatotrichum omnivorum, alfalfa 29:489
Phymatotrichum omnivorum, cotton 19:168; 28:447; 29:489
Phymatotrichum omnivorum, okra 22:447
Polyporus schweinitzii, lupine 36:374
Pythium aphanidermatum, watermelon 29:625
Pythium butleri, sugar-beet 28: 513
Pythium splendens, Aplanopsis simplex 39:169
Pythium splendens, lily 39:169
Pythium ultimum, guayule 35:637
Pythium ultimum, orchid 39:1062
Pythium ultimum, sorghum 19:553
Pythium ultimum, sugarcane 19: 551, 552, 553, 556
Pythium ultimum, wheat 19:553
Pythium spp., sugarcane 19:551, 552, 553, 556
Ramularia destructans, ginseng 8:558, 559
Ramularia panacicola, ginseng 8:558, 559
Rhizoctonia carotae, carrot 38: 441
Rhizoctonia carotae and Sclerotinia Fuckeliana, carrot 38:442
Rhizoctonia carotae and Sclerotinia sclerotiorum, carrot 38:442

ROT (Cont'd.)
Root Rot (cont'd.)
Rhizoctonia solani, oat 22:889
Rhizoctonia solani, sugar-beet 28:153; 29:793, 799
Rhizoctonia solani, wheat 22:889
Rhizoctonia sp., beet 26:559
Rhizopus nigricans, sweet potato 4:320; 24:810
Sclerotium bataticola, red clover 27:916
Sclerotium bataticola, sweet potato 3:168
Sclerotium rolfsii, carrot 21:1131
Sclerotium rolfsii, Lippia canescens 19:510
[illegible] potato 3:164
Thielavia basicola, ginseng 2:196
Trichoderma koningi, apple 6:101
Trichoderma koningi, sweet potato 1:188
Trichoderma lignorum, sweet potato 1:188
Xylaria mali, apple 28:484, 485
Non-parasitic
Pinus resinosa 5:215, 216
Seed Rot
Gibberella moniliformis, corn 23:389
Sheath Rot
Phytophthora arecae, Areca catechu 22:218
Soft Rot
Bacillus aroidae, calla-lily 14:468
Bacillus aroidae, kohl-rabi 14:464
Bacillus aroidae, potato 18:838
Bacillus aroidae, tobacco 14:469
Bacillus carotovorus, potato 16:151, 152, 153, 163; 17:156, 157, 159; 18:838; 20:225; 27:108
Bacillus mesentericus, potato 18:821, 838
Bacillus phytophthorus, potato 18:838
Bacterium campestre, cabbage 10:35

ROT (Cont'd.)
Soft Rot (cont'd.)
Botrytis cinerea, potato 23:994, 995; 31:441
Clonostachys araucaria var. rosea, potato 9:44
Erwinia carotovora, potato 37:227, 230
Erwinia carotovora, spinach 34:748
Erwinia spp., Sansevieria sp. 34:351
Fusarium eumartii, potato 6:324
Fusarium oxysporum, potato 9:260; 30:182
Fusarium radicicola, potato 9:44
Fusarium solani, potato 30:163
Penicillium oxalicum, potato 9:44
Phytophthora infestans, potato 33:1105
Rhizoctonia solani, potato 12:336; 32:728
Rotylenchus bradys, Dioscorea alata 27:866
Sclerotinia intermedia, potato 31:444
Sclerotium bataticola, potato 34:434
Sclerotium rolfsii, potato 33:516; 36:239
Verticillium sp., potato 9:44
Xylaria apiculata, potato 31:937
Non-parasitic
Blackheart, potato 3:182
Stem Rot
Bacterium sp., corn 11:75
Ceratostomella radicicola, date palm 31:1126
Colletotrichum falcatum, sugar-cane 34:210, 211; 40:433
Diplodia sp., Phoenix dactylifera 20:340, 342
Erwinia aroideae, celery 28:355
Erwinia carnegieana, Carnegiea gigantea 39:1031
Fusarium eumartii, potato 6:322
Fusarium moniliforme, corn 22:638
Fusarium moniliforme, sorghum 41:530
Fusarium oxysporum, Cereus schottii 24:496, 498
Fusarium solani, potato 30:163

ROT (Cont'd.)
Stem Rot (cont'd.)
Fusarium solani f. batatas, sweet potato 41:74
Fusarium tracheiphilum, cowpea 21:980
Fusarium spp., plus corn borer, corn 40:285
Physalospora tucumanensis, sugarcane 34:210, 211; 41:525
Physoderma sp., Agropyron repens 37:886
Phytomonas dissolvens, corn 16:244, 250, 267
Phytomonas stewartii, corn 25:999
Phytomonas vascularum, corn 25:999
Phytomonas vascularum, sorghum 25:999
Phytophthora cactorum, Viscaria sp. 29:653
Phytophthora palmivora, Dieffenbachia picta 37:868, 869
Phytophthora sp., asparagus 28:755
Polyporus circinatus, conifer 30:959, 960
Pseudomonas marginalis, witloof chicory 41:881
Rhizoctonia batatícola, corn 22:838
Sclerotinia libertiana, avocado 6:276
Sclerotinia libertiana, citrus 6:271
Sclerotinia trifoliorum, alfalfa 7:435
Sclerotium cepivorum, shallot 38:379, 382
Sclerotium rolfsii, cotton 21:1192
Stereum murrayi, hardwoods 31:84
Unidentified fungi, apple 30:938
Stump Rot
Bacterium carotovorus, cabbage 20:868
Ganoderma lucidum, coconut 26:156, 157
Tuber Rot
Alternaria solani, potato 15:283
Armillaria mellea, potato 4:322
Aspergillus niger, potato 4:322

RUSSETTING
Non-parasitic
Fungicide injury, apple 20:903

RUST (See also: Scrus)
Dicheirinia archeri, Lonchocarpus nicou 40:35, 36
Puccinia glumarum, barley 24:510, 511, 513
Puccinia graminis tritici, wheat 20:361; 36:561
Puccinia graminis tritici race 15B, wheat 34:888, 893, 896
Puccinia helianthi, sunflower 2:203
Puccinia orbicula, Prenanthes alba 18:198
Puccinia purpurea, sorghum 21:536, 537, 540
Puccinia sorghi, corn 2:203; 18:348
Uromyces phaseoli f. typica 18:168

SAVOYING
Peronospora tabacina, tobacco 29:80
Viruses
Alfalfa mosaic, alfalfa 24:242
Arabis mosaic, tobacco 34:325
Bean mosaic, bean 20:471
Blackberry dwarf, blackberry 17:634, 635, 636
Citrus crinkly-leaf psorosis, citrus 33:859
(Southern) celery mosaic, celery 24:696
Delphinium virus, delphinium 24:696
Papaya ring-spot, papaya 39:197
Potato para crinkle, potato 29:50
Potato rugose mosaic, potato 29:52
Potato virus C, potato 35:593
Prune dwarf, peach 32:748
Rape virus, leaf mustard 30:341
Raspberry alpha virus, raspberry 20:795
Raspberry beta virus, raspberry 20:795
Soja virus 1, soybean 38:726
Strawberry crinkle, strawberry 23:739
Sugar-beet virus, sugar-beet 32:329
Sweet clover virus, sweet clover 24:250
Tobacco leaf-curl, tobacco 38:367
Tobacco mosaic, Phacelia whitlavia 24:319

SAVOYING (Cont'd.)
Viruses (cont'd.)
Vicia faba mild mosaic, Vicia faba 23:449
Non-parasitic
Cotton 27:1172, 1173

SCAB
Actinomyces scabies, potato 2:148; 23:882; 30:699
Bacterium marginatum, gladiolus 23:
Elsinoe australis, citrus 28:74
Elsinoe canavaliae, lima-bean 23:
Elsinoe dolichi, Dolichos lablab 35:342, 344
Elsinoe fawcettii, citrus 26:395
Fusicladium photiniicola, Christmas berry 15:181
Heterodera marioni, sweet potato 17:554
Oospora scabies, potato 3:18
Phytomonas carotae, carrot 34:417, 418
Ramularia scabiosa, citrus 26:196
Sphaceloma araliae, Aralia spinosa 34:982
Sphaceloma fawcettii, citrus 15:99, 100; 20:346, 349; 23:476
Sphaceloma fawcettii var. scabiosa, citrus 26:196
Sphaceloma fawcettii var. viscosa, citrus 23:540
Sphaceloma murrayae, Salix lasiandra 34:988
Sphaceloma ricini, castor bean 35:
Sphaceloma violae, pansy 38:927
Sphaceloma violae, violet 38:927
Sphaceloma sp., Hesperethusa crenulata 26:72
Sphaceloma sp., poinsettia 31:947; 32:336
Spongospora subterranea, potato 3:
Venturia inaequalis, apple 30:175
Non-parasitic
Orange 6:47, 130, 131, 132

SCALD
Corticium koleroga, citrus 17:694, 695
Typhula graminum, grass 23:864, 865

SCIENTISTS
Arthur, J.C. 32:833
Arzberber, E.G. 21:345
Bain, S. M. 10:187
Bell, A.T. 10:373
Berg, Anthony 39:29
Bratley, C. O. 40:410
Buller, A. H. R. 35:578
Burger, O. F. 18:627
Burrill, T. J. 8:1
Butler, E. J. 34:149
Butler, O. R. 32:443
Carleton, Mark A. 19:321
Clinton, G. P. 28:379
Collins, J. F. 31:475
Cooke, M. C. 6:1
deBary, A. 1:1
Dopp, E. A. 35:746
Durand, E. J. 13:408
Earle, F. S. 20:923
Edgecombe, A. E. 35:328
Elliott, J. A. 14:129
Essary, S. H. 26:929
Farlow, W. G. 10:1
Fawcett, H. S. 39:866
Fitch, H. W. 17:205
Fraser, W. R. 34:708
Gaines, F. G. 36:88
Gilbert, W. W. 31:962
Halsted, B. D. 9:1
Hartig, R. 5:1
Hawkins, S. O. 27:1123
Hedgcock, G. G. 37:604
Hoggan, I. A. 27:1029
Horne, W. T. 35:1
Howard, N. O. 22:491
Jaczewski, A. 23:111
Jagger, I. C. 32:543
Jensen, J. L. 7:1
Jolivette, J. P. 36:415
Jones, L. R. 36:1
Kauffman, C. H. 22:271
Koch, G. 31:867
Leonian, L. H. 36:242
Lyman, G. R. 17:355
McMurran, S. M. 11:25
Meier, F. C. 29:293
Metcalf, H. 31:289
Miles, L. E. 32:268
Millardet, P-M-A. 4:1
Mitra, M. 34:939
Morse, W. J. 21:1095
Ninman, H. J. 26:405
Nishida, T. 19:881
Oberly, E. R. 15:61

SCIENTISTS (Cont'd.)
Orton, W. A. 21:1
Pammel, L. H. 22:669
Parron, E. E. 35:282
Pennington, L. H. 22:873
Petry, E. J. 30:989
Pieniecel, F. J. 17:135
Pritchard, F. J. 22:201
Ravn, F. K. 11:1
Reark, E. W. 11:327
Rolfs, P. H. 34:492
Rosenbaum, J. 16:895
Rostrup, F. G. E. 12:1
Satter, F. 28:447
Shelby, W. G. 15:1
Smith, E. F. 17:675
Stewart, F. C. 37:688
Stewart, V. B. 9:111
Stone, R. E. 30:880
Swingle, D. B. 34:769
Taubenhaus, J. J. 28:525
Thaxter, R. 23:564
Thomas, H. C. 19:1057
Thompson, N. F. 35:149
van Hook, J. M. 26:611
Vasey, H. E. 9:299
Waite, M. B. 36:176
Ward, H. M. 3:1
Weir, J. R. 36:480
Whetzel, H. H. 35:660
Whipple, O. C. 32:356
Wollenweber, H. W. 40:120
Woolman, H. M. 23:931
Woronin, M. S. 2:1
Wright, W. H. 21:243

SCLEROTIA
Aspergillus alliaceus 24:290
Aspergillus sclerotiorum 23:307
Botrytis alii 40:752, 753
Botrytis cinerea 3:174; 23:1147
Botrytis gladiolarum 39:266
Botrytis mali 21:1147
Claviceps purpurea 1:52
Claviceps purpurea and Tilletia tritici (combined) 2:140
Claviceps yanagawensis 32:809, 810
Colletotrichum atramentarium 16:34, 37, 40
Colletotrichum nigrum 16:348
Colletotrichum truncatum 25:124
Corticium arcolatum 30:123, 124
Corticium solereces 17:697, 698, 705, 708, 705, 709; 23:977

SCLEROTIA (Cont'd.)
Corticium microsclerotia 28:562, 563, 570, 573
Corticium solani 35:376, 385
Corticium vagum var. solani 5:62
Fusarium oxysporum 24:501
Helminthosporium erythrospilum 25:355
Ovulinia azaleae 30:238
Oxonium texanum 24:529, 531, 532
Phymatotrichum omnivorum 20:779; 21:552, 553; 29:499, 501
Physalospora zeae 36:202
Poria cocos 35:96
Pyrenophora sp. 25:385
Ramulispora sorghi 36:191, 194, 195
Rhizoctonia bataticola 22:638, 639, 640, 641
Rhizoctonia microsclerotia 7:112, 118
Rhizoctonia oryzae 28:238
Rhizoctonia solani 25:751; 26:237; 28:236; 29:613, 670; 33:173
Rhizoctonia zeae 34:1293, 1294, 1295, 1300
Rhizoctonia spp. 8:578
Sclerotinia camelliae 30:169
Sclerotinia intermedia 27:103; 31:444
Sclerotinia libertiana 4:256, 269, 437, 438; 10:500; 28:295
Sclerotinia minor 27:103
Sclerotinia panacis 2:30
Sclerotinia ricini 9:568
Sclerotinia sclerotiorum 15:251, 262, 269; 21:409, 413, 1196; 26:186, 187; 27:101, 103, 1048; 30:871; 41:1102
Sclerotium batatisola 3:166; 7:311; 27:914
Sclerotium bifrons 10:148
Sclerotium cepivorum 14:352; 36:382, 383
Sclerotium delphinii 17:245
Sclerotium fulvum 27:1115, 1116
Sclerotium gladioli 18:582, 629
Sclerotium rolfsii 8:65, 580; 11:378; 21:1132, 1192; 22:375; 26:1082; 33:516; 36:239; 38:84
Stromatinia sp. 5:192
Sycrocybe vralense 30:500, 510
Tilletiopsis sclerocystoides 39:738

SCLEROTIA (Cont'd.)
Typhula graminum 23:865, 868, 872
Umbilaginoidea virens 19:592
Verticillium dahliae 23:120

SCORCH
Marssonia potentillae, strawberry 11:[illegible]
Stagonospora curtisii, narcissus 23:770, 772, 776
Viruses
Cymbidium mosaic, Cymbidium orchid 41:418
Pierce's disease of grape, grape 41:924
Pierce's disease of grape, Hubam clover 41:925
Insect
Leafhopper, apple 16:422
Leafhopper, potato 13:239
Non-parasitic
Drought, maple 5:21
Drought, oak 5:23
Storm damage, maple 8:27
Cabbage 20:309
Grape 5:170
Iris 19:1123
Lily 19:1123
Potato 12:183, 184
Sugar-beet 35:911, 912, 913

SECOND-GROWTH
By old sweet potato mother root 23:94, 95

SEPTAE
Colletotrichum truncatum 41:979
Polyporus circinatus 30:958

SHOTHOLE
Cercospora fabae, Vicia faba 37:175
Coryneum beijerinckii, apricot 33:597
Coryneum beijerinckii, Prunus spp. 32:225
Helminthosporium vignae, cowpea 35:823
Keithia thujina, Thuja plicata 6:362
Peronospora tabacina, tobacco 29:82
Pestalotia disseminata, Terminalia arjuna 33:405
Phomopsis sp., Terminalia arjuna 33:405

SHOTHOLE (Cont'd.)
Tranzschelia pruni-spinosae, Prunus caroliniana 35:573
Tranzschelia pruni-spinosae, Prunus ilicifolia 35:573
Viruses
Cherry tatter-leaf, cherry 36:78
Cherry tatter-leaf, plum 36:78
Cherry yellows, cherry 38:510
Peach asteroid spot, peach 28:279
Genetic
Plum 33:1102
[illegible]
Fluorine injury, plum 38:31

SILVERING
Rhizoctonia microsclerotia, fig 7:111
Stereum purpureum, apple 1:178
Prunus veinclearing virus, cherry 31:465

SMUT (See: Suppression)

SNOWMOLD
Fusarium nivale, grass 24:198, 199, 203, 208
Typhula graminum, grass 23:864
Typhula itoana, grass 31:941

SORUS (See also: Rust)
Albugo occidentalis 29:613
Melanopsichium eleusinis 37:482, 483
Peridermium comptoniae 4:26
Peridermium pyriforme 4:26
Peridermium sp. 28:27
Puccinia malvacearum 1:62
Puccinia polyspora 5[illegible]
Puccinia pruni-persicae 2:144
Sphacelotheca cruenta 5:152
Sphacelotheca panici-miliacei 33:575
Sphacelotheca panici-miliacei x Sorosporium syntherismae 33:575
Sphacelotheca sorghi 5:152; 31:1045
Sorosporium everhartii 31:1044
Sorosporium syntherismae 33:575
Sorosporium syntherismae X Sphacelotheca panici-miliacei 33:575

SORUS (See also: Rust) (Cont'd.)
Thecaphora solani 34:712
Tilletia caries 34:590
Tilletia foetida 34:590
Tilletia laevis 8:109, 110, 111
Tilletia tritici 8:109, 110, 112
Tranzschelia pruni-spinosae 29:645
Urocystis gladioli 38:924
Uromyces hobsoni 29:784

SPERMATIA
Cercospora cladosporioides 34:258
Fusarium moniliforme var. subglutinans 26:687
Guignardia aesculi 6:11
Hapalosphaeria deformans 33:138
Mycosphaerella brassicola 36:482
Ovulinia azaleae 30:240
Puccinia sorghi 23:924
Sclerotinia gladioli 24:402
Sclerotinia intermedia 14:325
Sclerotinia panacis 1:29
Sclerotinia ricini 9:568
Sclerotinia trifoliorum 7:437
Sclerotium gladioli 18:522, 529

SPERMODOCHIA
Ovulinia azaleae 30:240

SPERMOGONIA
Cercospora cladosporioides 34:258
Cronartium coleosporioides 7:138
Cronartium comandrae 7:137
Gymnosporangium globosum 29:804
Gymnosporangium juniperi-virginianae 23:804
Mycosphaerella angulata 32:75
Mycosphaerella areola 22:233
Mycosphaerella cerasella 20:324
Mycosphaerella populicola 31:245
Mycosphaerella populorum 31:245
Peridermium sp. 28:48
Puccinia albiperda 11:343
Puccinia graminis 21:1017
Puccinia helianthi 21:1014
Puccinia sorghi 23:924
Puccinia stakmanii 33:383, 384
Systremma acicola 31:66
Systremma hobsoni 29:784, 785, 788
Uromyces hobsoni 29:784, 785, 788

SPINDLE-TUBER
Spindle-tuber virus, potato 16:305

SPORANGIAL GERMINATION
Choanephora pereicaria 15:609
Olpidium sp. 13:451, 452, 453
Peronospora destructor 28:265
Peronospora nicotianae 24:343
Peronospora tabacina 26:765
Physoderma graminis 41:1067
Phytophthora capsici 34:814
Phytophthora cinnamomi 35:169
Phytophthora Meadii 20:955
Phytophthora melongenae 20:955
Phytophthora mexicana 13:530
Phytophthora terrestria 7:128
Plasmopara viticola 2:237, 241
Pythium acanthicum 29:398
Pythium anadrum 29:419
Pythium dissotocum 30:191, 193
Pythium helicoides 29:411
Pythium marsipium 31:496, 497
Pythium mastophorum 29:1007
Pythium myriotylum 33:270
Pythium oedochilum 31:481
Pythium oligandrum 36:786
Pythium ostracodes 33:279, 284
Pythium paligenes 31:488
Pythium paroecandrum 30:204
Pythium perillum 30:199
Pythium periplocum 29:405
Pythium polymastum 29:1012
Pythium salpingophorum 36:808, 810
Pythium undulatum 36:854, 858
Pythium vexans 36:822
Rhizophidium pollinis 4:62
Sclerospora graminicola 22:584
Sclerospora graminicola var. Andropogonis-sorghi 22:590
Sclerospora noblei 32:207
Sclerospora sorghi 22:584
Synchytrium fragariae 39:150

SPORANGIAL MORPHOLOGY
Choanephora cucurbitarum 29:899, 900
Choanephora pereicaria 15:609
Olpidium sp. 13:451, 452, 453
Peronospora destructor 28:265
Peronospora nicotianae 24:343; 25: 517
Peronospora parasitica 16:365; 25: 956
Peronospora tabacina 26:765; 30: 266
Physoderma graminis 41:1067
Physoderma sp. 37:887
Phytophthora cactorum 24:416

SPORANGIAL MORPHOLOGY (Cont'd.)

484; 30:953; 34:814

Phytophthora inflata 39:487

Phytophthora Meadii 20:955

Phytophthora mexicana 13:530; 17: 488

Phytophthora omnivora 16:726; 17: 485, 486, 487

Phytophthora terrestria 7:128

Pythium butleri 32:913

Pythium dissotocum 30:131, 135

Pythium graminicola 22:585

Pythium periilum 30:199

Pythium polymastum 29:1012

Pythium undulatum 36:854, 858

Rhizophidium pollinis 4:62

Sclerospora graminicola 22:585

SPORES

Spore Balls

Thecaphora deformans 24:712

Thecaphora pacifica 34:713

Thecaphora solani 33:1087; 34: 712, 713

SPORE FORMATION

SPORE FORMATION (Cont'd.)

38:384

Urocystis agropyri (Sclerospores) 39:337

Ascospores

Gymnoconia interstitialis 8:28; 25:459

Uromyces erythrini 25:459

Uromyces hobsoni 25:785

Ascospores

Didymellina applanata 21:879

Didymellina iridis 10:107

Leptosphaeria arenaria 18:455; 470

Mycosphaerella anguiola 32:98

Mycosphaerella areola 22:228

Mycosphaerella aurea 8:423

Mycosphaerella brassicola 36: 483

Mycosphaerella grossulariae 6: 421

Mycosphaerella ligulicola 37: 793

Mycosphaerella louisianae 31: 229

Mycosphaerella phycostegiae 35: 327

Mycosphaerella populicola 31: 246

Mycosphaerella populorum 31:246

Ophiobolus sp. 24:969

Otthia amica 5:58

Physalospora corticis 32:1071

Pleotrichella veneta 7:98

Pseudopeziza trifolii 25:158

Pseudopyles medicaginis 15:672, 679

Sclerotinia ricini 9:568

Sphaerulina trifolii 13:121

Systremma acicola 31:66

Taphrina deformans 15:72

SPORE GERMINATION (Cont'd.)

Basidiospores

Corticium arsolatum 30:124
Corticium galactinum 30:143
Corticium koleroga 17:704; 23: 877, 879
Corticium microsclerotia 29: 564
Ecoronartium musicola 8:202, 203
Gymnosporangium juniperi- virginianae 3:282
Microstroma juglandis var. robustum 7:44
Tilletia tritici 20:499
Uromyces hobsoni 29:785

Chlamydospores

Exoascus deformans 14:320
Melanopsichium eleusinis 37:482
Mycosphaerella ontariensis 5:8
Pestalozzia funerea 4:379
Phytophthora terrestria 7:129
Pythium undulatum 36:854, 858
Taphrina johansonii 15:72
Thielaviopsis basicola 32:756
Tolyposporium filiferum 23:987, 988

SPORE GERMINATION (Cont'd.)

Conidia

Alternaria allii 17:132
Alternaria sp. 28:446
Ansatospora macrospora 34:96
Beauveria bassiana 21:1120
Beauvaria globulifera 21:1120
Botrytis byssoidea 15:709
Botrytis cinerea 3:174
Botrytis squamosa 15:711
Cercospora arachidicola 23:636
Cercospora festucae 40:1025
Cercospora kikuchii 41:309
Chalaropsis thielavioides 30: 805
Cladosporium carpophilum 18:328
Coccomyces kerriae 7:404
Colletotrichum schizanthi 1:128
Colletotrichim truncatum 41:979
Colletotrichum villosum 35:985
Colletotrichum sp. 16:345
Coryneum microstichum var. staphyleae 21:1164
Cylindrocladium scoparium 7:413
Dilophospora alopecuri 15:23
Diplodia frumenti 20:736
Diplodia macrospora 20:442
Diplodia natalensis 36:248
Diplodia theobromae 36:566
Entomophthora coronata 38:119
Entypella parasitica 28:744
Exoascus deformans 14:221
Exosporina fawcettii 38:342
Fusarium cubense 9:390
Fusarium moniliforme 23:370
Fusarium oxysporum 30:133
Glioeladium aureum 38:449
Gloeosporium limetticolum 2:231
Glomerella gossypii 28:791
Glomerella rufomaculans 1:200
Guignardia aesculi 6:11
Helminthosporium sp. 21:46
Heterosporium tropaeoli 40:556
Isariopsis griseola 7:347
Lasiodiplodia tubericola 3:166
Macrophoma tumefaciens 5:184
Marssonina melanis 37:687
Melanconium sp. 6:392
Monilinia fructicola 40:1140
Mycosphaerella angulata 32:75
Mycosphaerella fragariae 28:318
Mycosphaerella ligulicola 39: 793
Ormathodium fici 38:712
Ovulina azaleae 30:239

SPORE GERMINATION (Cont'd.)
Conidia (cont'd.)
Pestalozzia funerea 4:377, 378
Phomopsis citri 2:112
Phyllosticta antirrhini 9:382; 10:244
Phyllosticta solitaria 22:351
Physalospora corticis 32:1071
Pseudopeziza ribis 25:138
Ramularia areola 22:232
Ramularia cyclaminicola 40:1031
Ramularia destructans 8:567
Ramularia panacicola 8:569
Ramulispora sorghi 36:193, 194, 195
Rhizosphaera kalkhoffi 37:509
Rosellinia herpotrichioides
Schizoxylon microsporum 36:744
Scirrhia acicola 40:727
Sclerotinia americana 15:580
Sclerotinia cinerea 15:588
Selenophoma brunigena 31:954
Septoria apii 22:796
Septoria apii graveolentis 22:
Septoria lycopersici 35:727
Septoria tritici 12:588, 590
Sphaceloma sp. 29:107
Sphaeronema fimbriatum 3:166
Sporocybe azaleae 29:518; 30:
Stagonospora curtisii 35:779
Systrema acicola 31:60
Trichoderma koningi 1:168
Trichoderma lignorum 1:168
Trichoseptoria fructigena 30:
Trichothecium roseum 41:637
Tuberculina maxima 25:257
Tubercularia fici 1:15
Venturia cerasi 18:326, 327
Phytophthora palmivora 21:949
Plasmopara viticola 2:257
Pythium acanthicum 29:399
Pythium mastophorum 29:1077
Pythium myriotylum 33:275
Pythium oligandrum 36:799
Pythium ostracodes 33:284
Pythium periplocum 36:804
Pythium vexans 36:834
Sclerospora graminicola 22:244; 23:311
Sclerospora sorghi 22:578
SPORE GERMINATION (Cont'd.)
Chlamydospores
Pythium anandrum 36:840, 842
Pythium oligandrum 36:799
Spores (See: Basidiospores)
Teliospores
Cronartium fusiforme 37:859
Puccinia glumarum 21:784
Puccinia malvacearum 1:62
Puccinia pruni-persicae 2:144
Puccinia stakmanii 33:384
Sphacelotheca panici-miliacei 33:570
Sphacelotheca sorghi 31:256, 257
Sorosporium reilianum 19:435
Sorosporium syntherismae 33:570
Tilletia tritici 25:1095, 1097
Tilletia tritici (dwarf bunt strain) 31:76, 77; 33:733
Ustilago bullata 31:191
Tranzschelia pruni-spinosae typica 29:76
Uromyces viciae 14:70
Urocystis agropyri 39:537
Urocystis gladioli 28:599
Urocystis occulta 24:875, 878, 881
Urocystis tritici 19:128, 135, 137
Ustilago avenae 27:549
Ustilago hordei 31:179
Ustilago levis 34:482
Ustilago nigra 31:285; 33:198, 201
Ustilago nuda 31:285; 33:196
Ustilago striaeformis 14:266, 30:99; 33:711; 38:60
Ustilago striiformis 37:731
Ustilago striiformis f. poae-pratensis 36:882
Ustilago tritici 15:599
Ustilago zeae 19:442; 29:479; 31:335, 338; 33:758

Ascospores
Cronartium ribicola 8:291
Melampsora lini 16:187
Puccinia glumarum 21:770
Puccinia graminis tritici 24:
81; 33:494; 37:746
Puccinia pruni-persicae 2:144
Puccinia triticina 37:745, 748
Zoospores
Phytophthora terrestria 7:128
Plasmopara viticola 2:243
Pythium acanthicum 29:399
Pythium dissotocum 30:191
Pythium helicoides 29:411
Pythium marsipium 31:497
Pythium myriotylum 33:270
Pythium odeochilum 31:479, 481
Pythium ostracodes 33:278
Pythium paligenes 31:488
Pythium perifilum 30:199
Pythium periplocum 29:405
Pythium salpingophorum 36:810
Pythium undulatum 36:858
Pythium vexans 36:822

SPORE GERMINATION: FACTORS AFFECTING
Fungicides
Mycosphaerella fragariae (copper) 28:318
Tranzschelia punctata (bordeaux) 21:156
Tranzschelia punctata (lime-sulphur) 18:360; 21:150, 161
Light
Cronartium ribicola 8:291
Plant Extracts
Diplodia natalensis (onion) 35:
249

SPORE GERMINATION: FACTORS AFFECTING
(Cont'd.)

Substrate
Ustilago avenae 33:203
Ustilago hordei 33:202
Ustilago levis 33:202
Ustilago nigra 33:202

SPORE MORPHOLOGY
Ascosporous
Gymnoascus interstitialis 8:89
Peridermium balsameum 6:870
Peridermium comptoniae 4:26
Peridermium pyriformae 4:26
[illegible]
Puccinia graminis 9:570
Puccinia oxalidis 9:570
[illegible]
Hypoxylon diathrauston 27:309
Lophodermium brachysporum 3:135
Megalonectria pseudotrichia 28:314
Mycosphaerella brassicola 36:483
Mycosphaerella louisianae 31:286
Mycosphaerella populicola 31:246
Mycosphaerella pomiricola 38:394
Ophiostroma novulcui 40:484, 485
Rosellinia subiculata 27:309
Rosellinia thelena 27:309
Sclerotinia fructicola 29:380
Sclerotinia vicini 9:568
Basidiosporous
Corticium microsclerotia 29:564
Cronartium fusiforme 37:359
[illegible]
Microstroma juglandis var. roburatum 7:44
Puccinia pruni-spinosae 2:146
Puccinia stakmanii 33:354
Sphacelotheca panici-miliacei 38:570
Sphacelotheca sorghi 31:256, 257
Sorosporium syntheriomae 33:570
Tilletia tritici (dwarf bunt strain) 38:783
Tranzschelia pruni-spinosae typica 29:76
Ustilago levis 34:482

SPORE MORPHOLOGY (Cont'd.)
Basidiosporous (cont'd.)
Ustilago nigra 35:195, 201
Ustilago nuda 33:195
Ustilago striiformis 37:751
Ustilago zeae 19:442; 29:479
Chlamydosporous
Alternaria sp. 26:536, 537
Cephalosporium cinnamomeum 30:971
Diplodia delphinii 40:619

Fomes officinalis 11:174
Fusarium bulbigenum var. lycopersici 33:958
Fusarium oxysporum 24:301; 30:126
Fusarium oxysporum f. delphinii 39:915
Fusarium retusum 38:958
Fusarium solani f. fabae 38:591
Ganoderma lucidum 26:158
Helminthosporium vignae 35:828
[illegible]
Melanopsichium eleusinis 37:482, 485
Pestalozzia funerea 4:379
Phytophthora arecae 22:220
Phytophthora cinnamomi 26:38
Phytophthora palmivora 22:224
Polyporus balsameus 38:982
Polyporus circinatus 30:956
Polyporus subcartilagineus 33:982
Poria cocos 35:96
Poria mutans 33:982
Poria sarcicio-mollis 33:982
Poria xantha 33:982
Pythium undulatum 36:852, 854
Ramularia candida 3:242
Ramularia destructans 8:567
Ramularia macrospora 3:242
Ramularia olida 3:242
Ramularia panacicola 8:569

Sporocybe azaleae 30:508
Stagonospora curtisii 23:779

Ascochyta pinodella 19:105
Ascochyta pisi 17:337; 19:932
Ascochyta pisi var. medicaginum 19:932
Ascochyta vicia-lathyroides 19:932
Ascochytella pentstemoni 31:196
Beauveria bassiana 20:1120
Botrytis byssoides 15:700
Botrytis cinerea 3:174
Botrytis squamose 15:711
Botrytis sp. 6:360
Brachysporum sp. 10:437
Calonectria graminicola 3:49, 242
Cephalosporium balanoides 31:
Coniothecium fimbriata 41:16
arachidicola 23:683
Cercospora beticola 24:110
Cercospora cruenta 14:305; 24:110
daria 24:110
Cercospora dubia 24:160
Cercospora kikuchi 41:309
Cercospora malkoffiana 12:64
Cercospora personata 23:685, 686,
Cercospora physalidis 21:1107
Cercospora solani 24:1:07
Cercospora thujina 35:180
Cercosporella brassicae 38:867
Cercosporella penzana 32:738
Chalara quercina 34:635; 36:434
Chalaropsis thielavioides 30:995
Cladosporium malorum 21:1142
Cladosporium pisicolum 24:992
Cladosporium sp. 16:346
Clonostachys araucaria var. rosea 9:40
Corconyces kerrii 7:404
Colletotrichum fragariae 21:741, 743
Colletotrichum lagenarium 25:271
Colletotrichum lilii 31:56
Colletotrichum orbiculare 15:3
Colletotrichum trichellum 33:80
Corynespora
Corynespora cassiicola
Cylindrocarpon
Cylindrocarpon
Cylindrocarpon

Conidia (cont'd.)

Fusarium discolor 14:216
Fusarium discolor var. sulphureum 3:49; 14:216
Fusarium equiseti 39:369
Fusarium eumartii 17:197
Fusarium falcatum 3:49
Fusarium flocciferum 39:365
Fusarium gibbosum 3:49
Fusarium graminearum 39:365
Fusarium hyperoxysporum 4:283
Fusarium lonchoras 14:216
Fusarium lonchoras var. microsporon 14:216
Fusarium lutulatum 14:216
Fusarium malii 14:216
Fusarium martii 3:49; 14:216; 17:197
Fusarium martii var. phaseoli 28:376
Fusarium moniliforme 14:216
Fusarium moniliforme 17:228; [illegible]:570
Fusarium moniliforme var. subglutinans 26:687
Fusarium orthoceras 3:49, 242; 4:283
Fusarium orthoceras var. gladioli 34:279
Fusarium orthoceras var. trisseptatum 14:216
Fusarium oxysporum 3:49; 4:283; 14:216; 17:197; 24:501; 30:193
Fusarium oxysporum var. batatas 39:379
Fusarium oxysporum var. gladioli 16:532, 518
Fusarium oxysporum var. longiceus 14:216
Fusarium oxysporum var. resupinatum 14:216
Fusarium pirinum 15:96
Fusarium radicola 4:283
Fusarium radicicola 14:216
Fusarium redolens 3:49; 14:216
Fusarium retusum 33:958
Fusarium rhizochromatistes 14:216
Fusarium rhizochromatistes var. microsclerotium 14:216
Fusarium rubiginosum 3:49
Fusarium sambucinum 39:369
Fusarium sclerostromaton 14:216

Fusarium semitectum 3:242
Fusarium solani 3:29; 17:197
Fusarium solani f. fabae 38:591
Fusarium solani v. martii f. 2
Fusarium solani v. martii f. 3 40:667
Fusarium spinaciae 13:200
Fusarium sublunatum 3:49
Fusarium sublunatum var. elongatum 39:365
Fusarium trichothecioides 3:49, 242
Fusarium udum var. pusillum 3:242
763, 764
Fusarium ventricosum 3:49, 242
Fusicladium pirina 15:182
Fusicoccum putrefaciens 19:101
Fusicoccum pyrorum 13:230
Gibellula suffulta 2:136
Gibberella saubinetii 4:282
Gibberella saubinetii 3:49
Gliocladium aureum 38:449
Gliocladium roseum 38:449
Gloeocercospora inconspicuua
Gloeocercospora sorghi 33:223
Gloeodes pomigena 22:946
Gloeosporium gloeosporioides 2:231
Gloeosporium limettioolum 2:231
Glomerella piperata 16:345
Glomerella sp. 16:345
Guignardia aesculi 6:11
Haimesia lythri 21:1057
Harposporium dicaraeum 31:798
Helminthosporium carbonum, race I 34:219
Helminthosporium carbonum, race II 34:219
Helminthosporium carposaprum 36:990
Helminthosporium erythrospilum 25:351, 359
Helminthosporium gramineum 36:
Helminthosporium maydis 31:513;
Helminthosporium oryzae 3:242
Helminthosporium rostratum 37:180; 40:96
Helminthosporium sacchari 18:774; 40:94, 95, 96, 98
Helminthosporium stenospilum 17:716; 40:96
Helminthosporium turcicum 31:513
Helminthosporium sp. 21:46, 5
Hendersonia diplodioidea 5:56
Heterosporium phlei 9:509
Heterosporium tropaeoli
Herpotrichia nigra 3:156
Hormodendron cladosporioides 21:1148
Hypomyces ipomoeae 3:49, 242
Hypomyces rosi 3:242
Isaria cicadae-tachoides 12:170
Lasiodiplodia tubericola 3:166
Leptomitosaria avenaria 15:20
Leptosphaerulina trifolii 16:702
Leucostoma cincta 31:69
Macrophoma fici 8:26
Macrophoma tumefaciens 5:104
Macrosporium herculeum 25:271
Macrosporium sp.
Melanconis juglandis 13:419, 420
Melanconium sp. 6:390
Meria coniospora 31:796
Microascus trigonosporus 38:965
Mycosphaerella cerasella 20:
Mycosphaerella fragariae 3:245, 28:318
Mycosphaerella ligulicola 39:293
Mycosphaerella ontariocola 5:9
Mycosphaerella pinodes 17:379
Mycosphaerella puerariicola 38:35
Mycosphaerella sclerotiorum 3:242
Mycosphaerella tulasnei 21:1
Nectria discophora 3:242
Nectria galligena 3:49, 242
Nectria ipomoeae 4:282
Nectria sanguinea 36:695
Nectriospora phaseoli 18:58
Neocosmospora vasinfecta 3:49
Neottiospora yuccae-filia 5:

SPORE MORPHOLOGY (Cont'd.)

Conidia (cont'd.)

Oidium fungivorum 5:194
Ophiobolus fuliginis 24:968
Penicillium oxalicum 9:37
Pestalotia aquatica 19:225
Pestalotia cesati 19:208
Pestalotia clavata 19:218
Pestalotia copernica 19:218
Pestalotia curta 19:209
Pestalotia foedans 19:208
Pestalotia funerea 19:208
Pestalotia gibbosa 19:216
Pestalotia gladicola 19:207
Pestalotia gracilis 19:218
Pestalotia guepini 19:232
Pestalotia inquinans 19:225
Pestalotia leprogena 19:218
Pestalotia macrotricha 19:207
Pestalotia monoziana 19:218
Pestalotia molleriana 19:225
Pestalotia pallidicolor 19:218
Pestalotia palmarum 19:208
[illegible] 19:[illegible]
Pestalotia podocarpi 24:1027
Pestalotia rhododendri 19:221
Pestalotia scirpina 19:207
Pestalotia sphaerelloides 19:207
Pestalotia stellata 19:221
Pestalotia theae 19:209
Pestalotia torulosa 19:218
Pestalotia vaccinii 19:209
Pestalotia vermiformis 19:225
Pestalotia versicolor 19:225
Pestalozzia funerea 4:577
Pestalozzia sp. 4:69
Phoma insidiosa 11:265
Phoma piceana 4:68
Phoma pomi 2:72
Phoma sp. 4:66; 21:253
Phomopsis caribaea 12:416
Phomopsis crotalariae 23:603
Phomopsis sp. 33:405
Phyllosticta antirrhini 9:520, 521, 522
Phyllosticta vaccinii 37:494
Physalospora rhodina 20:737
Physalospora zeae 36:208
Physalospora zeicola 23:66
Plenodomus destruens 3:245
Pleospora mali 18:573
Podosporiella verticillata 5:[illegible]

SPORE MORPHOLOGY (Cont'd.)

Conidia (cont'd.)

Pseudodiscosia avenae 33:136
Pseudophomago sp. 18:846
Pseudoplea medicaginis 15:673
Pseudosaccharomyces sp. 18:846
Ramularia archusae 3:242
Ramularia arvola 22:232
Ramularia candida 3:242
Ramularia eudidymae 3:242
Ramularia macrospora 3:242
Ramularia magnusiana 3:242
Ramularia olida 3:242
Rosellinia destructans 8:567
Rosellinia didymum 3:49
Rosellinia penacicola 8:569
Saccharomyces sp. 6:396
[illegible] coleman[illegible] 18:[illegible]
Scirrhia acicola 40:727
Sclerotinia ricini 9:568
Sclerotinia sclerotiorum 15:259
Septoria acicola 19:996
Septoria agropyri 13:20
Septoria albopunctata 37:489
Septoria apii 22:797
Septoria apii graveolentis 22:797
Septoria aurea 6:425
Septoria avenae 12:453; 24:135
Septoria brevispora 27:1002
Septoria nodorum 12:544; 13:20
Septoria passerinii 13:20
Septoria ribis 6:421
Septoria rubi 27:1002; 33:990
Septoria secalis 13:20
Septoria tritici 13:20; 24:135, 139
Septoria viciae 30:542
Sphaceloma fawcettii 15:102; 23:540
Sphaceloma fawcettii var. viscosa 23:540
Sphaceloma lippiae 29:655
Sphaceloma ricini 35:349
Sphaceloma sp. 28:107
Sphaeronemella fragariae [illegible]
Sphaeronema fimbriatum 3:166
Sphaeropsis malorum 2:190; 15:340
Sphaerulina trifolii 13:121
Sporocybe azaleae 29:518
Sporonema oxycocci 34:458
Sporotrichum malorum 19:452
Stagonospora curtisii 25:778,

SPORE MORPHOLOGY (Cont'd.)
Conidia (con't'd)
Stemphylium congestum 18:577
Stemphylium solani 20:517
Stigmina platani 19:669
Stilbum cinnabarinum 25:214
Taphrina deformans 25:57
Thielavia basicola 2:196
Thyrospora sarcinaeforme 15:716
Titaeospora andropogonis 33:223
Torula ligniperda 12:374
Trichoderma koningi 1:188
Trichoderma lignorum 1:188
Trichothecium arrhenopum 33:228
Trichothecium roseum 41:637
Tuberculariа fici 1:15
Tuberculina maxima 25:256
Tuscenia juncoidea 5:58
Ustilaginoidea virens 19:590
Ustulina vulgaris 17:146
Ustulina zonata 17:146
Verticillium sp. 13:218
Zygosporium oschioides 7:350
Endospores
Chalara quercina 34:632
Glomerella paidii 1:200
Glomerella rufomaculans 1:200
Ramularia destructans 8:567
Thielavia basicola 2:196
Thielaviopsis basicola 32:756
[illegible]
Albugo bliti f. achyranthes 29:620
Albugo eurotiae 29:620
Albugo occidentalis 29:620
Cystopus bliti 4:62
Peronospora nicotiana 24:343; 25:519
Peronospora tabacina 25:518
Phytophthora capsici 30:953
Phytophthora infestans 16:129
Phytophthora sp. 20:208, 210
Plasmopara viticola 2:236
Pythiacystis sp. 15:397, 399
Pythium acanthicum 29:399
Pythium butleri 28:86
Pythium graminicolum 33:228
Pythium myriotylum 33:271, 273
Pythium ostrochilum 28:93
Pythium oligandrum 36:787, 789, 790, 792
Pythium ostracodes 33:280, 281
Pythium periplocum 36:804
Pythium salpingophorum 36:808
SPORE MORPHOLOGY (Cont'd.)
Oospores (cont'd.)
Pythium ultimum 28:[illegible]
Pythium vexans 36:828, 834
Pythium spp. 18:564
Sclerospora butleri 23:588, 590
Sclerospora graminicola 29:995, 22:245; 28:848; 32:872
Sclerospora graminicola var. andropogonis 19:1109
Sclerospora macrospora 32:872
Sclerospora noblei 19:1109; 32:207
Sclerospora northi 19:962
Sclerospora sorghi 22:576
Parthenospores
Pythium anandrum 36:840, 842
Pythium oligandrum 36:793
Pythium salpingophorum 36:812
Scolecospores
Diplodia zeae 31:857
Sporidia (See: Basidiospores)
Teliospores
Angiospora zeae 31:857
Cronartium fusiforme 37:859
Cronartium ribicola 26:924
Entyloma ellisii 41:856
Gymnosporangium interstitialis 8:[illegible]
Melampsora farlowii 29:464
Puccinia coronata var. [illegible]
Puccinia malvacearum 1:62
Puccinia polyspora 31:857
Puccinia pruni-persicae 2:144
Puccinia pruni-spinosae var. discolor 28:418
Puccinia pruni-spinosae var. [illegible] 28:416, 420
Puccinia rubigo-vera 25:677, 678
Puccinia sorghi 31:857
Puccinia stakmanii 33:[illegible]
Sphaceloma eruena 5:152, 153
Sphaceloma panici-miliacei X Serosporium syntherianae 33:595
Sphaceloma sorgi 5:352
Serosporium syntherianae 33:595
Serosporium syntherianae X Sphaceloma panici-miliacei 33:595
Tilletia caries 34:568
Tilletia foetida 34:568
Tilletia tritici 25:250
Tilletia tritici (dwarf bunt form) 31:75; 34:588; 39:992

SPORE MORPHOLOGY (Cont'd.)

[illegible]

Urocystis agropyri 39:337
Urocystis gladioli 38:925,934
Ustilago avenae 21:939
Ustilago bromivora 16:476
Ustilago bullata 41:483
Ustilago hordei 38:853; 41:843
Ustilago hordei X Ustilago [illegible] 41:[illegible]
Ustilago striiformis 14: 285; 36:64
Ustilago striiformis 37:781, 783
Ustilago striiformis f. poae-pratensis 36:880,881
Ustilago tritici 15:599

[illegible]

Puccinia pruni-persicae 2:144
Puccinia rubigo-vera 25:676
Puccinia stakmanii 33:504
Transschelia punctata 21: 136,139
Uromyces appendiculatus 14:70,76

Zoospores

[illegible]

Plasmopara viticola 2:241, [illegible]
Pythium myriotylum 33:270,275
Pythium oligandrum 56:786,799
Pythium ostracodes 35:278,284
Pythium periplocum 36:804
Pythium salpingophorum 36:810
Pythium vexans 36:822
Rhizophidium pollinis 4:62
Synchytrium fragariae 39:150

[illegible] (Cont'd.)
Damping-off (Cont'd.)
Pythium oligandrum 36:786, 799
Pythium [illegible]
Pythium periplocum 36:804
Pythium sulpingophorum 36:[illegible]
Pythium vexans 36:822
Rhizophidium pollinis 4:62
Synchytrium fragariae 39:150

SCLEROTINIA
Cercospora arachidicola [illegible]
Cercospora personata 35:[illegible]
Cercospora sequoiae var. juniperi 35:186
Cercospora thujina 35:186
Fusarium cubense 9:390
Fusarium martii var. phaseoli [illegible] 376
Fusarium nivale 24:204
Fusarium oxysporum 18:[illegible]
Fusarium oxysporum var. batatas 35:870
Gleosporospora sorghi 55:283
Hadrawia lythri 21:1066
Hypocreae rubi 3:242
Mycosphaerella fragariae 3:242
Mycosphaerella physostegiae [illegible]
Nectria cinnabarina 19:1128
Pestellina fragariae 6:266
Penicillium spp. 20:253
Ramularia areola 22:232
Ramularia olida 3:242
Ramulispora sorghi 36:193, 194, 195
Sclerotinia gladioli 24:401
Sclerotinia laxa 29:344; 31:780, 782, 785; 33:1212; 38:550
Sphaeloma fawcettii 30:346
Stigmina platani 19:669
Stilbum cinnabarinum 25:212, 214
Strumella coryneoidea 41:108
Tuberculoria fici 1:15
Tuberculoria ulmea 37:244
Tuberculoria vulgaris 34:986
Tuberculina maxima 25:257

SPOT
Flower-spot
Alternaria zinniae, zinnia 33:373
Ascochyta chrysanthemi, chrysanthemum 39:790
Botrytis cinerea, cyclamen 38:[illegible]

SPOT (Cont'd.)
Flower-spot (Cont'd.)
Botrytis sp., tomato 6:365
Cladosporium paeoniae, peony 30:410
Phytomonas [illegible] gardeniae, gardenia 36:866
Sclerotinia laxa, cherry 38:850
Lily necrotic fleck virus, lily 34:534
Fruit-spot
Alternaria solani, tomato 34:342
Alternaria tenuis, tomato 34:342
Alternaria sp., apple 4:336
Ascochyta abelmoschi, okra 40:1057
Ascochyta imperfecta, alfalfa 35:[illegible]
Ascochyta pisi, Vicia faba 37:210
Bacillus [illegible], walnut 21:221
Bacterium aroidea, tomato 14:451, 452, 453
Bacterium citriputeale, lemon 3:290
Bacterium citriputeale, orange 3:290
Bacterium flaccumfaciens, bean 16:22
Bacterium punctulans, tomato 23:898, 900
Bacterium vesicatorium, tomato 13:314
Bacterium sp., pepper 12:516
Cephaleuros (virescens) mycoidea, orange 28:284, 285
Cephaleuros virescens, guava 31:96
Cercospora cladosporioides, olive 54:258
Cladosporium pisicolum, pea 24:892, 893, 895
Cladosporium vignae, cowpea 15:462
Colletotrichum lindemuthianum, bean 8:614
Colletotrichum pisi, pea 11:502
Colletotrichum [illegible], lima bean 25:123, 124
Colletotrichum truncatum, soybean 41:977

Corticium microsclerotia, bean 39:588
Corynneum beijerinckii, apricot 35:507
Diaporthe phaseolorum var. sojae, bean 37:446
Diaporthe phaseolorum var. sojae, soybean 37:446
Fusicce piri, apple 36:459
Gymnosporangium germinale, apple 25:548
Gymnosporangium juniperi-virginianae, apple 25:548
Leptothyrium pomi, pear 8:235
Macrosporium solani, tomato 28: 115
Macrosporium sp., tomato 10:21
Melanconium sp., tomato 8:392
Mycelia sterilia, lime 8:47
Nematospora phaseoli, lima bean 12:530, 551
Phoma lingam, cabbage 8:403
Phoma pomi, apple 8:72
Phoma sp., banana 12:102
Phyllosticta solitaria, apple 14:236
Phyllosticta vaccinii, blueberry 37:494
Phytomonas corylina, walnut 30: 727
Phytomonas juglandis, walnut 30:727
Phytomonas medicaginis var. phaseolicola, bean 16:927; 34:474
Phytomonas syringae, lemon 35: 36; 35:943
Phytomonas syringae, orange 35: 943
Prabylenchus sp., peanut 38:877
Pseudomonas lachrymans, cucumber 41:1061
Pseudomonas lachrymans, melon 46:944
Pseudomonas papulans, apple 7: 109
Pseudomonas pisi, pea 16:183; 17:927
Pullularia pullulans, tomato
Sporocybe azaleae, rhododendron sp. 10:273
Taphrina deformans, peach 34:346

spot (Cont'd.)
Fruit-spot (cont'd.)
Tranzschelia punctata, peach
Viruses
Bean virus, bean 33:744
Bean virus 4, bean 41:869
Citrus psorosis B, citrus
Fig mosaic, fig 33:720, 792
Peach suture spot, peach 33:157
Tobacco ring-spot, soybean
Tomato spotted wilt, tomato 30:819
Tomato spotted wilt, pea 26: 819
Tomato streak, tomato 16:516
Non-parasitic
Boron deficiency, apple 30: 150
Cuticle cracking, tomato 37: 143
Drought, apple 8:491; 12:186
Lightning injury, tomato 31: 1021
Soft scald, apple 25:781
Sunscald, pepper 38:285
Water core, apple 3:127
Peach 37:143
Tomato 30:346
Insect injury, bean 36:495
Leaf-spot
Alternaria allii, onion 17:152
Alternaria brassicola, cabbage 41:881
Alternaria citri, lemon 27:964
Alternaria citri var. cerasi, cherry 7:169
Alternaria crassa, Datura tatula 7:329
Alternaria longipes, tobacco 21:643, 646; 33:356
Alternaria nelumbii, lotus 11: 140
Alternaria ricini, castor bean 35:254
Alternaria solani, potato 13: 101
Alternaria solani (toxic principle of), tomato 41:1107, 1108, 1109
Alternaria tenuis (?), cotton 8:99

SPOT (Cont'd.)
Leaf-spot (cont'd.)
Alternaria zinniae, zinnia 33:373
Annulus orae var. phaseoli, bean 40:834
Annulus orae var. phaseoli, cucumber 40:834
Ascochyta majalis, lily-of-the-valley 32:260
Ascochyta lycopersici, tomato 6:365
Ascochyta pisi, pea 17:397
Ascochyta pisi, Vicia faba 37:209, 211
Bacterium angulatum, tobacco 24:1382; 27:297, 298; 30:77; 34:169
Bacterium coronofaciens var. atropurpureum, brome grass 13:86
Bacterium cucurbitae, cucumber 23:310
Bacterium dieffenbachiae, Dieffenbachia picta 29:961
Bacterium erodii, Erodium texanum 4:232
Bacterium erodii, Pelargonium sp. 4:232
Bacterium malvacearum, cotton 22:264; 30:680
Bacterium punctulans, tomato 23:899
Bacterium tabaci, catnip 14:180
Bacterium tabaci, chick weed 14:180
Bacterium tabaci, cucumber 14:180
Bacterium tabaci, lamb's-quarters 14:180
Bacterium tabaci, maple 14:180
Bacterium tabaci, ladies' thumb 14:180
Bacterium tabaci, pokeweed 14:180
Bacterium tabaci, prickly lettuce 14:180
Bacterium tabaci, quack grass 14:180
Bacterium tabaci, sunflower 14:180
Bacterium tabaci, timothy 14:180
Bacterium tabaci, tobacco 27:296, 297, 298, 300

SPOT (Cont'd.)
Leaf-spot (cont'd.)
Bacterium tabacum, tobacco 30:75, 77, 78; 32:383, 384; 34:169, 170, 171; 35:1024
Bacterium tardicrescens, iris 28:643, 644
Bacterium vesicatorium raphani, cabbage 20:656
Bacterium vesicatorium raphani, pepper 20:655
Bacterium vesicatorium raphani, radish 20:654, 655
Bacterium vesicatorium raphani, tomato 20:656
Bacterium sp., pepper 12:516
Bacterium sp., tung-oil 20:757
Botrytis cinerea, bean 40:229
Botrytis cinerea, calla 14:154
Botrytis cinerea, cyclamen 14:154
Botrytis cinerea, gladiolus 38:753
Botrytis cinerea, Pelargonium peltatum 14:154
Botrytis cinerea, Rubus spectabilis 14:154
Botrytis cinerea, vetch 34:246
Cephaleuros virescens, guava 31:96
Cephalosporium cinnamomeum, Nephthytis afzelii 30:968
Cephalosporium cinnamomeum, Syngonium podophyllum var. albolineatum 30:968
Cephalosporium dieffenbachiae, Dieffenbachia picta 32:173
Cephalosporium fici, fig 38:709
Cercospora arachidicola, peanut 23:635
Cercospora bataticola, sweet potato 21:95
Cercospora beticola, beet 8:129
Cercospora carotae 33:115; 34:607
Cercospora cruenta, bean 14:353
Cercospora fabae, Vicia faba 37:175, 176
Cercospora festucae, brome grass 40:1024
Cercospora festucae, fescue grass 40:1024
Cercospora kikuchii, soybean 41:307

SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Cercospora lathyrina, Lathyrus latifolius 32:1068
Cercospora lathyrina, Pisum arvense x P. sativum 31:1062
Cercospora medicaginis, hop clover 11:316
Cercospora melongenae, eggplant 18:82
Cercospora musarum, banana 18:
Cercospora nicotianae, tobacco
Cercospora oryzae, rice 37:1008;
Cercospora personata, peanut 22:635
Cercosporella albo-maculans, cabbage 17:690
Cercosporella brassicae, cabbage 38:894
Cercosporella brassicae, turnip 38:894
Cladosporium cucumerinum, cucumber 40:2097
Cladosporium paeoniae, peony 30:410
Cladosporium pisicolum, pea 24:
Cladosporium vignae, cowpea 15:462
Coccomyces kerriae, Kerria japonica 7:471
Coccomyces sp., Rhododendron sp.
Colletotrichum falcatum, sorghum 40:486
Colletotrichum falcatum, sugarcane 34:882
Colletotrichum phomoides, tomato
Colletotrichum pisi, pea 11:502
Colletotrichum villosum, vetch 38:978, 980
Corticium areolatum, orange 30: 121, 127
Corticium microsclerotia, bean 24:502
Corticium microsclerotia, tung 24:642
Coryneum beijerinckii, Prunus besseyi 32:224
Coryneum beijerinckii, Prunus caroliniana 32:226
SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Coryneum beijerinckii, Prunus
Coryneum beijerinckii, Prunus hortulana 32:225
Coryneum beijerinckii, Prunus ilicifolia 32:225
Coryneum beijerinckii, Prunus
Coryneum beijerinckii, Prunus
Coryneum beijerinckii, Prunus mexicana 32:223
Coryneum beijerinckii, Prunus
Coryneum beijerinckii, Prunus
Coryneum beijerinckii, Prunus texana 32:225
Cronartium ribicola, currant 29:31
Diplocarpon earliana, strawberry 24:625
Dothichiza caroliniana, blueberry 37:491
Elsinoe parthenocissi, Parthenocissus quinquefolia 32:424
Elsinoe piri, apple 36:459
Elsinoe piri, pear 36:459
Erostrotheca multiformis, sweet pea 18:845
Fusarium moniliforme, Sansevieria sp. 30:323, 550
Fusarium sp., snapdragon 41:545
Fusicladium pisicola, pea 16: 556
Gloeocercospora inconspicua, blueberry 37:497
Gloeocercospora sorghi, sorghum 33:323
Gloeosporium inconspicuum, elm 24:64
Gloeosporium necator, Rubus sp.
Gloeosporium ulmicolum, elm 24: 63
Gloeosporium venetum, Rubus sp. 36:522
Gloeosporium sp., Pholidota imbricata 25:456
Glomerella cingulata, lespedeza 30:525
Glomerella cingulata, lupine 33: 251

SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Glomerella rufomaculans, sweet pea 2:160
Gnomonia ulmea 24:68
Guignardia bidwellii f. muscadinii, grape 36:906
Guignardia bidwellii f. parthenocissi, Boston ivy 38:717
Guignardia bidwellii f. parthenocissi, Virginia creeper 38:717
Gymnosporangium germinale, apple 23:548
Gymnosporangium globosum, apple 29:804
Gymnosporangium juniperi-virginianae, apple 29:804
Helminthosporium carbonum, race I, corn 34:216
Helminthosporium carbonum, race II, corn 34:216
Helminthosporium heveae, Hevea brasiliensis 38:1025
Helminthosporium maydis, race I, corn 31:514, 516
Helminthosporium maydis, race II, corn 31:517
Helminthosporium maydis, corn 34:216
Helminthosporium oryzae, rice 37:284
Helminthosporium rostratum, corn 37:181
Helminthosporium sacchari, Cymbopogon citratus 31:183
Helminthosporium sacchari, Napier grass 32:48
Helminthosporium sacchari, Pennisetum purpureum 28:439, 440
Helminthosporium sacchari, sugarcane 18:769, 774(color)
Helminthosporium sativum, barley 23:332; 24:730
Helminthosporium triseptatum, Agrostis alba 25:346
Helminthosporium triseptatum, Agrostis palustris 25:346
Helminthosporium triseptatum, Agrostis tenuis 25:346
Helminthosporium turcicum, corn 31:512

SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Helminthosporium victoriae, oat 41:301
Helminthosporium vignae, cowpea 35:823, 829
Helminthosporium vignae, soybean 35:829
Helminthosporium sp., sugarcane 21:43, 44, 58 (color)
Heterosporium phlei, timothy 9:577
Heterosporium tropaeoli, nasturtium 40:555
Isariopsis griseola, bean 7:347
Leptosphaeria bondari, citrus 25:885
Leptosphaeria vignae, cowpea 18:702
Macrosporium carotae, carrot 34:607
Macrosporium cucumerinum, cucurbits 13:200, 201
Macrosporium herculeum, turnip 35:271
Macrosporium sarcinaeforme, red clover 29:543
Marmor flavopunctum, cowpea 40:851
Marmor flavopunctum, tepary bean 40:851
Marmor flavopunctum, soybean 40:851
Marmor laesiofaciens, bean 34:511
Marmor medicaginis var. capsici, bean 37:784
Marmor medicaginis var. capsici, broad bean 37:784
Marmor medicaginis var. capsici, Nicotiana glutinosa 37:782
Marmor medicaginis var. capsici, sweet pea 37:782
Marmor medicaginis var. capsici, tobacco 37:782
Marmor medicaginis var. Ladino, bean 39:522
Marmor medicaginis var. phaseoli, bean 41:969
Marmor medicaginis var. phaseoli, Gomphrena globosa 41:969
Marmor secretum, buckwheat 34:82

SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Marmor secretum, cantaloupe 34: 79
Marmor secretum, pokeweed 34: 82, 83
Marmor secretum, potato 34:80
Marmor secretum, sugar-beet 34: 78
Marmor tabaci var. rosettae, Nicotiana sylvestris 41:1095
Marmor terrestre var. oculatum, oat 36:367
Marmor upsilon, Chenopodium urbicum 38:981
Marmor upsilon, Lycium halimifolium 38:981
Marmor upsilon, Physalis floridana 38:981; 40:446
Marmor upsilon, potato 38:981
Melampsoropsis sp. Rhododendron sp. 10:278
Meliola guianensis, cocoa 18: 348
Musivum tabaci var. plantaginis, Plantago major 33:211
Musivum tabaci var. plantaginis, tobacco 33:211, 213
Mycosphaerella angulata, grape 32:72
Mycosphaerella arachidicola, peanut 31:949
Mycosphaerella brassicola, cabbage 36:485
Mycosphaerella fragariae, strawberry 12:376; 24:685
Mycosphaerella louisianae, strawberry 31:227
Mycosphaerella physostegiae, Physostegia virginiana 35: 326
Mycosphaerella pisi, pea 17:397
Mycosphaerella populicola, Populus tacamahaca 31:243
Mycosphaerella populorum, Populus candicans 31:243
Mycosphaerella populorum, Populus saccharifera 31:246
Mycosphaerella populorum, Populus tacamahaca 31:243
Mycosphaerella pruericola, kudzu 38:349, 351
Ormenhodium fici, fig 38:709
Pellicularia filamentosa, Hevea brasiliensis 35:740

SPOT (Cont'd.)
Pellicularia filamentosa, Hibiscus cannabinus 38:504
Pellicularia filamentosa, Hibiscus sabdariffa 38:504
Pellicularia filamentosa, Leucaccarpus utilis 40:38
Pellicularia filamentosa, sugar-beet 35:742
Peronospora tabacina, Nicotiana repanda 37:725
Peronospora tabacina, tobacco 29:79, 80, 81, 82; 31:287
Pestalotia disseminata, Terminalia arjuna 33:405
Pestalotia macrotricha, Rhododendron catawbiense 20:87, 89
Pestalotia podocarpi, Podocarpus elongata 24:1027
Pestalotia sp., camellia 19:199
Pezizella lythri, peony 30:410
Phoma insidiosa, sorghum 11:263
Phoma lingam, cabbage 8:414; 41:623
Phoma medicaginis, alfalfa 26: 1016
Phomopsis sp., Terminalia arjuna 33:405
Phragmidium rubi-idaei, raspberry 36:334
Phyllosticta antirrhini, snapdragon 9:355
Phyllosticta vaccinii, blueberry 37:494
Phyllosticta sp., snapdragon 10:355
Physalospora obtusa, apple 27: 814
Physalospora zeae, corn 38:202
Phytomonas aceris, Acer macrophyllum 29:868
Phytomonas begoniae, begonia 29:634
Phytomonas bowlesii, Bowlesia septentrionalis 17:508
Phytomonas cattleyae, orchid 36:695
Phytomonas gardeniae, gardenia 31:198
Phytomonas geranii, Geranium [illegible]
Phytomonas juglandis, walnut 34:335

Phytomonas maculifolium gardeniae, gardenia 36:866
Phytomonas medicaginis var. phaseoli, bean 32:248; 34:474
Phytomonas polycolor, tobacco 20:693, 696
Phytomonas primulae, Primula polyantha 26:1054
Phytomonas stewartii, corn 25:994
Phytomonas stewartii, Setaria glauca 25:994
Phytomonas stewartii, Setaria italica 25:994
Phytomonas stewartii, sorghum 25:994
Phytomonas stewartii, sudan grass 25:994
Phytomonas syringae, Hibiscus sp. 33:83
Phytomonas tardicrescens, iris 27:614
Phytomonas vasculorum, corn 25:995
Phytomonas vasculorum, sorghum 25:995
Phytomonas vasculorum, sugarcane 25:995
Phytomonas viburni, Viburnum opulus 21:907, 911
Phytomonas washingtoniae, Washingtonia filifera 33:1202
Phytomonas woodsii, carnation 25:116
Phytophthora capsici, pepper [illegible]
Phytophthora palmivora, Aleurites fordi 22:822
Plasmopara lyocopersici, tomato 29:545
Pseudodiscosia avenae, oat 33:152
Pseudomonas lachrymans, melon 38:944
Pseudomonas medicaginis var. phaseolicola, bean 40:606
Pseudomonas phaseolicola, bean 37:197
Pseudomonas phaseolicola, kudzu 38:349
Pseudomonas pisi, pea 16:184
Pseudomonas tabaci, soybean 25:[illegible]58, 852, 855

Pseudomonas tabaci, tobacco [illegible] 456
Pseudoperonospora humuli, hop 27:940; 32:352
Pseudoplea medicaginis, Medicago maculata 15:690
Puccinia coronata, oat 39:300
Puccinia psidii, Eugenia jambos 28:158
Puccinia psidii, Pimenta acris 28:160
Puccinia stakmanii, Boutelova [illegible]
Puccinia stakmanii, cotton 33:383, 384
Pyrenophora bromi, Bromus inermis 35:242
Pythium ultimum, orchid 39:1062
Ramulispora sorghi, sorghum 36:[illegible]
Rhizoctonia oryzae, rice 28:234, 243
Rhizoctonia ramicola, Elaeagnus pungens 41:616, 617
Rhizoctonia solani, cotton 34:600, 601
Rhizoctonia solani, holly 32:906, 907
Rhizoctonia solani, rice 28:243
Sclerotinia laxa, cherry 38:860
Selenophoma bromigena, Bromus inermis 35:238
Septoria albopunctata, blueberry 37:487
Septoria apii, celery 22:793, 794
Septoria apii graveolentis, celery 22:793, 794
Septoria lycopersici, tomato 14:156; 35:18
Septoria rubi, raspberry 33:990
Septoria tritici, oat 24:135
Sphaceloma symphoricarpi, Symphoricarpus albus var. laevigatus 18:801
Sphaerulina trifolii, clover 13:126
Stagonospora curtisii, Amaryllis belladonna 25:265
Stagonospora curtisii, Chlidanthus fragrans 25:265
Stagonospora curtisii, Crinum powelli 25:265

SPOT (Cont'd.)
Leaf Spot (cont'd.)
Stagonospora curtisii, Calico-
phus sp. 35:[illegible]
[illegible]
sebrum sp. 25:[illegible]
Stagonospora curtisii, Hymeno-
callis calathina 25:[illegible]
Stagonospora curtisii, Leuco-
[illegible]
Stagonospora curtisii, Lycoris
squamigera 25:[illegible]
Stagonospora curtisii, Pancra-
tium maritimum 25:[illegible]
Stagonospora curtisii, Sterm-
bergia lutea 25:[illegible]
Stagonospora curtisii, Zephyr-
anthes candida 25:[illegible]
Stemphylium botryosum var.
[illegible], salsify 33:151
Stemphylium [illegible]
tragopogoni, solani, tomato
29:624
Stigmina platani, Platanus
racemosa 29:646
Synchromum acicola, Pinus palu-
stris 31:25, 64
Taphrocheldia pruni-spinosae,
Prunus caroliniana 29:673
Taphrocheldia pruni-spinosae,
Prunus ilicifolia 35:573
Taphrocholia sp., peach 21:186
Tylenchus dipsaci, Digitalis
purpurea 23:[illegible]
Viruses
Alfalfa virus 2, bean 24:96,
97; 27:239
Alfalfa mosaic, (oak-leaf
pattern) tobacco 40:982
Carnation mosaic, carnation
37:324
Cherry buckskin, cherry 31:
918
Cherry line-pattern, cherry
31:[illegible]
Cherry tatter leaf, cherry
36:72
Cherry tatter leaf, plum
36:78
Chrysanthemum stunt, chrys-
anthemum 41:949
Chrysanthemum virus Q,
chrysanthemum 41:940
Clover ring-spot, red clover
36:746
Clover virus, petunia 24:259
Crucifer mosaic, tobacco 23:
641, 648
Cucumber mosaic, cucumber 24:
790
Cucumber mosaic, lily 27:562;
30:251
Cucumber mosaic, Nicotiana
sylvestris 24:442
Cucumber mosaic, sugar-beet 23:
452
Cucumber mosaic, tobacco 24:
718
Cucumber mosaic, Vigna sinensis
34:286
Cucumber mosaic strain 6, corn
25:352
Cucumber mosaic strain 6, cow-
pea 24:752; 25:950
Cucumber mosaic strain 6, lily
27:563
Cucumber mosaic strain 6, sugar-
beet 34:904
Cucumber mosaic strain 6, zinnia
25:778, 779, 949; 27:563; 38:
65
Delphinium virus, Nicandra
physaloides 24:472/Tobacco 24:974
Lily coarse mottle, lily 34:726
Lily mosaic, lily 27:563
Lily mosaic, tobacco 27:564
Lily necrotic fleck, lily 34:
532, 533, 535, 536, 540, 546
Lovage mosaic, Nicotiana syl-
vestris 34:537
Pea virus 1, pea 27:247, 836
Pea virus 1, Vicia faba 28:925
Pea wilt virus, cowpea 32:105
Pea wilt virus, Phaseolus aureus
32:109
Peach asteroid spot, peach 23:
278; 39:600
Peach line pattern, peach 31:
1009
Peach yellows, peach 30:323
Potato paracrinkle, potato 23:
501
Potato pseudo nst necrosis,
potato 29:926
Potato virus C, potato 26:604;
35:593
Potato virus X, Amaranthus
retroflexus 29:52

SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Viruses (cont'd.)
Potato yellow dwarf, Nicotiana rustica 26:866
Prune virus (?), prune 30:347
Solanum virus 4, Hyoscyamus niger 29:175
Spotted wilt, broad bean 30:291
Spotted wilt, celery 30:291
Spotted wilt, Cineraria sp. 34:944
Spotted wilt, Datura stramonium 30:294
Spotted wilt, Emilia sagittata 22:305, 307; 30:310
Spotted wilt, endive 30:294
Spotted wilt, eggplant 30:292
Spotted wilt, Nicotiana glutinosa 30:294
Spotted wilt, pepper 30:292
Spotted wilt, pineapple 21:866, 867, 876; 22:302, 303
Spotted wilt, potato 29:163; 30:291, 309
Spotted wilt, spinach 30:291
Spotted wilt, tobacco 30:292
Spotted wilt, tomato 24:944; 30:286, 300, 301, 302, 303, 307
Sugar-beet mosaic, tobacco 23:457, 458
Tip blight, Datura sp. 29:163
Tip blight, nasturtium 29:163
Tip blight, potato 29:163
Tip blight, Solanum capsicastrum 29:158
Tip blight, tobacco 29:164
Tip blight, tomato 29:158
Tobacco aeuba mosaic, Nicotiana sylvestris 24:445, 447, 455, 457, 460
Tobacco broken ring-spot, bean 34:327
Tobacco etch, severe strain of, Physalis peruviana 32:1060
Tobacco mosaic, bean 24:1071; 31:434, 435, 436
Tobacco mosaic, cucumber 39:809
SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Viruses (cont'd.)
Tobacco mosaic, Nicotiana glutinosa 24:1071; 27:78
Tobacco mosaic, Nicotiana langsdorfi 24:850, 1071; 27:78
Tobacco mosaic, Nicotiana tabacum x N. glutinosa 37:827
Tobacco mosaic, Nicotiana spp. 24:994
Tobacco mosaic, pepper 24:987, 988, 1071
Tobacco mosaic, tobacco 24:852, 1071; 33:213
Tobacco mosaic, leaf-shriveling strain of, tomato 32:987
Tobacco mosaic, mild strain of, Nicotiana glutinosa 41:595
Tobacco mosaic, mild strain of, Nicotiana glutinosa x N. tabacum 41:593
Tobacco mosaic, mild strain of, tobacco 41:598
Tobacco mosaic, rib-grass strain of, tobacco 31:1089
Tobacco mosaic, strain C superimposed on prior infection with strain A, tobacco 41:582, 585
Tobacco mosaic, strain K15 of, tobacco 28:685
Tobacco mosaic, strains N2, of, tobacco 23:682, 687
Tobacco mosaic, strain 302A of, zinnia 25:786, 787
Tobacco mosaic, severe strain of, tobacco 41:598
Tobacco necrosis, tobacco 29:85
Tobacco necrosis, tulip 40:300
Tobacco necrosis, strains A-F of, cowpea 40:302
Tobacco ringspot, bean 24:96, 97
Tobacco ringspot, cowpea 26:507
Tobacco ringspot, tobacco 34:63, 66

SPOT (Cont'd.)
Leaf-Spot (cont'd.)
Viruses (cont'd.)
Tobacco ringspot, tobacco (recovery) 26:505
Tobacco severe etch, Nicotiana glutinosa 36:645
Tobacco severe etch, Physalis peruviana 36:645
Tobacco spot necrosis, tobacco 23:337
Tobacco streak, guar 38:4
Tobacco streak, sweet clover 40:517
Tobacco yellow mosaic, tobacco 25:486
Tobacco yellow spot, tobacco 34:744
Xanthomonas campestris, cabbage 41:821
Xanthomonas translucens, Bromus inermis 40:47
Xanthomonas translucens var. cerealis, barley 36:455
Insect Induced
Mealy bug, pineapple 23:244, 245
[illegible]
Asteroid spot, Prunus cerasifera 35:49
Boron deficiency, olive 33: 994
Boron toxicity, barley 24: 765
Cold injury, tulip 9:475
Heat injury, Agropyron cristatum 40:526
Picric acid injury, barley 24:727, 720, 729
Picric acid injury, rye 31: 960
Water soaking, morning glory 35:1037
Water soaking, tobacco 29: 986, 987; 35:1021, 1023
Alfalfa, 6:91; 19:125, 127, 132, 133, 134, 136, 137
Peanut, 31:949, 950
Sweet clover, 19:126
Ring-Spot
Alfalfa mosaic, alfalfa 40:982
Annulus orae var. phaseoli, tobacco 40:636
Annulus tabaci, tobacco 39:355

SPOT (Cont'd.)
Ring-Spot (cont'd.)
Annulus tabaci var. cyamopsidoes, jimson weed 40:836
Annulus tabaci var. cyamopsidoes, tobacco 39:355
Apricot virus, apricot 32:100
Apricot-plum virus, peach 31: 327
Broad ring spot, sunflower 32: 607
Broad ring spot, tobacco 32:606
Broad ring spot, tomato 32:606
Cherry mild rugose mosaic, cherry 40:985
Cherry yellows, cherry 38:510
Cherry yellows, peach 32:715
Cherry yellows, Prunus virginiana 32:460, 461
Clover (sweet) virus, tobacco 24:251, 252
Cucumber mosaic, Gloriosa rothschildiana 34:548
Lovage mosaic, tobacco 34:337
Marmor medicaginis var. capsici, tobacco 37:782
Mycosphaerella brassicola, cauliflower 5:262
Orchid mosaic, orchid 41:403, 406, 412, 649
Papaya ring-spot, papaya 39:201
Pea wilt, broad bean 32:109
Potato ring-spot, tobacco 28: 908
Potato virus, potato 23:351
Prune dwarf, prune 32:745
Spotted wilt, Datura stramonium 30:294
Spotted wilt, tobacco 30:292
Tobacco broken ring-spot, tobacco 34:325
Tobacco mosaic, strain K16 of, tomato 28:684
Tobacco mosaic, strain K15 of, tobacco 28:685
Tobacco mosaic, strain N4 of, tobacco 28:678
Tobacco ring-spot, Nicotiana sylvestris 26:671
Tobacco ring-spot, tobacco 26: 504, 570; 29:912, 914
Tobacco virus, tobacco 17:321, 323, 324, 325, 326, 327; 21: 226; 23:328

SPOT (Cont'd.)
Ring-Spot (cont'd.)
Tomato ring-spot, Datura stramonium 32:1039
Tomato ring-spot, Nicotiana tabacum 32:1039
Tomato ring-spot, tomato 32:1038
Seed-Spot
Bacterium flaccumfaciens, bean 16:22
Bacterium sojae, soybean 11:340
Cercospora kikuchii, soybean 41:306
Cercospora medicaginis, burclover 11:316
Cercospora oryzae, rice 27:1006
Cladosporium pisicolum, pea 24:893, 895
Colletotrichum truncatum, lima bean 25:124
Dematium pullulans, pea 24:827
Diaporthe phaseolarum var. sojae, soybean 37:447
Heterosporium tropaeoli, nasturtium 40:556
Nematospora coryli, pecan 23:1000
Phoma lingam, cabbage 8:412
Pseudomonas lachrymans, cucumber 41:1063
Pseudomonas pisi, pea 17:627
Pseudoplea medicaginis, burclover 15:690
Puccinia graminis tritici, wheat 1:151
Sclerotium rolfsii (?), peanut 37:670
Viruses
Bean virus, bean 33:744
Spotted wilt, pea 26:919
Tobacco ring spot, soybean
Xylaria longeana, Ginkgo biloba 32:92
Non-parasitic
Bean 25:727
Corn 29:906
Flax 38:804
Pea 24:1384, 1385
Peanut 37:659
Insect
Lygus bug, bean 36:495, 498
Lygus bug, cowpea 36:496
Lygus bug, lima bean 36:496

SPOT (Cont'd.)
Sheath-Spot
Trichoderma lignorum, rice 24:1375

STINKING SMUT (See: Bunt)

STREAK
Bacterium tardicrescens, iris 28:644
Phytomonas stewartii, corn 30:247
Sclerospora graminicola, Setaria italica 26:462
Viruses
Carnation mosaic, carnation 33:824
Carnation virus, carnation 35:38
Narcissus white streak, narcissus 29:393
Pea mottle virus plus pea wilt wilt virus, pea 32:105
Potato virus, potato 8:493; 10:98, 100
Raspberry mild streak, raspberry 38:223; 39:382
Spotted wilt, Cineraria 34:943
Spotted wilt, bean 30:291
Sugarcane chlorotic streak, sugarcane 28:856
Sugarcane virus (?), sugarcane 23:675
Tobacco virus, tobacco 26:286, 287, 288
Tomato tip blight, tomato 29:157
Tomato virus, tomato 16:312, 315
Xanthomonas translucens var. phleipratensis, timothy 35:938
Non-parasitic
Manganese deficiency, sugarcane 18:776, 778

STRIPE
Dilophospora alopecuri, wheat 15:18
Helminthosporium victoriae, oat 39:361
Physoderma sp., Agropyron repens
Ramulispora sorghi, sorghum 36:191
Titaeospora andropogonis, sorghum 35:758
Virus
Tobacco mosaic, tomato 30:539
Genetic
Tomato fruit 32:497

Botrytosphaeria boro pustule 6:[illegible]
Cleistocoma purpureum 1:[illegible]
Clitocybe tabescens 9:[illegible]
Cytospora scelia Liriodendri 30:[illegible]
Dothiorella sp. 31:[illegible]
Elsinoe batatatis 3:[illegible]
Endothia parasitica 20:[illegible]; 35:[illegible]
Marssonina juglandis var. [illegible]
Phyllachora graminis 7:55
Pseudaria destructans 8:[illegible]
Pseudaria palmicola 8:[illegible]
Xylaria apiculata 31:[illegible]

[illegible] (See: Dwarfing)

[illegible]
Claviceps purpurea plus Tilletia tritici, wheat 29:145
Dilophospora alopecuri, wheat 15: 19, 20
Erysiphe lagerstromiae, crape myrtle 23:815
Melanopsichium eleusinis, Eleusine coracana 37:492
Sclerospora graminicola, Pennisetum typhoideum 22:262
Sphacelotheca cruenta, sorghum 5: 194
Sphacelotheca sorghi x Sorosporium reilianum, sorghum 35:375
Tilletia caries, wheat 19:681, 682, 683, 684
Tilletia foetens, wheat 6:25, 26
Tilletia laevis, wheat 8:108, 109, 110, 111; 20:667
Tilletia tritici, Agropyron subsecundum 26:[illegible]
Tilletia tritici, Hordeum nodosum 26:[illegible]
Tilletia tritici, rye 13:211; 21: 459, 460; 23:434
Tilletia tritici, Sitanion jubatum 29:[illegible]
Tilletia tritici, wheat 8:108, 109, 110, 111
Tilletia tritici plus Claviceps purpurea, wheat 28:145
Tilletia tritici plus Ustilago tritici, wheat 28:145
Tilletia tritici spp., Agropyron cristatum 26:831

[illegible] (Cont'd.)
Tilletia tritici spp., Agropyron pauciflorum 26:831
Tolyposporium filiferum, sorghum 23: [illegible]
Urocystis tritici, wheat 41:1084
Ustilago avenae, oat 21:682
Ustilago bromivora, western rye grass 16:474
Ustilago bullata, Elymus sibiricus 30:1080
Ustilago bullata, Hordeum nodosum 30:1009
Ustilago coicis, Coix sp. 10:383
Ustilago hordei, barley 35:973
Ustilago hordei race 7, barley 35:975
Ustilago hordei race 12, barley 35:975
Ustilago nigra, barley 33:203
Ustilago shiraiana, bamboo 6:382
Ustilago striaeformis, timothy 14:236
Ustilago tritici, rye 15:601
Ustilago tritici, wheat 15:603
Ustilago tritici plus Tilletia tritici, wheat 28:145
Viruses
Bean mosaic, bean pods 20:472
Cherry yellows, cherry 38:512
Cranberry false-blossom, cranberry 23:671
Sugar-beet curly top, flax 35: 604, 605

[illegible]
Cenangiostomella ulmi 37:926
Cercospora cladosporioides 34:258
Cibellula suffulta 2:135
Graphium rubrum 24:301
Podosporiella verticillata 5:325
Sporocybe azaleae 30:503, 510

[illegible]
Coleosporium crowellii 28:522
Cronartium fusiforme 37:859
Cronartium ribicola 26:924
Gymnosporangium clavipes 29:803
Gymnosporangium blasdaleanum 4:270
Gymnosporangium germinale 22:725
Gymnosporangium globosum 22:725; 29:803
Gymnosporangium juniperi-virginianae 22:725; 29:803

TELIA (Cont'd.)
Cuehmeola uredinis 40:201
Melampsora farlowii 29:484
Melampsora lini 40.235
Puccinia graminis tritici 33:336
Puccinia stakmanii 33:383
Puccinia subnitens 4:206
Puccinia tomipara 25:678

TUBERCLES
Thyrostroma compactum 26:802

TUMEFACTION
Anguillulina pratensis, Dioscorea sp. 24:165
Anguillulina pratensis, pineapple 26:412
Bacterium pseudotsugae, Pseudotsuga macrocarpa 30:624
Bacterium pseudotsugae, Pseudotsuga taxifolia var. glauca 30:624
Bacterium tumefaciens, apple 15:108; 16:808; 18:291; 22:172, 182, 187
Bacterium tumefaciens, Araucaria Bidwillii 26:401
Bacterium tumefaciens, bean 26:712
Bacterium tumefaciens, beet 21:19
Bacterium tumefaciens, begonia 16:497, 503
Bacterium tumefaciens, blueberry 28:72
Bacterium tumefaciens, boysenberry 34:260
Bacterium tumefaciens, castor bean 13:98; 15:451; 16:494, 503; 23:[illegible]
Bacterium tumefaciens, cauliflower 13:98
Bacterium tumefaciens, Cupressus arizonica 23:98
Bacterium tumefaciens, Cupressus sempervirens 27:846
Bacterium tumefaciens, daisy 1:10; 13:90; 29:225
Bacterium tumefaciens, Diospyros kaki 27:846
Bacterium tumefaciens, Ficus aurea 9:208
Bacterium tumefaciens, [illegible] 15:451
Bacterium tumefaciens, Hippocrate volubilis 9:208

TUMEFACTION (Cont'd.)
Bacterium tumefaciens, hop 34:690
Bacterium tumefaciens, Kalanchoe daigremontiana 34:260
Bacterium tumefaciens, Libocedrus decurrens 27:845, 846
Bacterium tumefaciens, marigold 29:227; 32:28, 32
Bacterium tumefaciens, Mirabilis jalapa 29:225
Bacterium tumefaciens, Opuntia Keyensis 24:931
Bacterium tumefaciens, Paris daisy 32:28
Bacterium tumefaciens, peach 1:10; 6:194; 30:419, 423
Bacterium tumefaciens, periwinkle 41:964, 965
Bacterium tumefaciens, plum 6:194
Bacterium tumefaciens, prune 6:194
Bacterium tumefaciens, raspberry 15:451
Bacterium tumefaciens, rose 13:96, 97; 15:451
Bacterium tumefaciens, rubber 15:451
Bacterium tumefaciens, Schinus molle 27:846
Bacterium tumefaciens, Sequoia gigantea 25:440
Bacterium tumefaciens, sugar-beet 1:10; 13:98
Bacterium tumefaciens, sunflower 31:140, 143, 144, 146; 33:87, 97
Bacterium tumefaciens, Taxus baccata var. erecta 28:154
Bacterium tumefaciens, tobacco 13:116; 15:451
Bacterium tumefaciens, tomato 21:19; 27:846
Bacterium sp., Gypsophila paniculata 22:924
Cronartium coleosporioides, Pinus [illegible]
Cronartium comandrae, Pinus ponderosa 7:137
Cronartium fusiforme, slash pine 33:34
Cronartium quercum, Pinus sylvestris 32:786, 793
Cronartium quercus, Pinus virginiana 4:7, 10
Ditylenchus dipsaci var. amsinckiae, Amsinckia intermedia 30:42,

[illegible]
[illegible] peritheca, Veronia parasitica 17:[illegible]
[illegible]phospora elopecuri, wheat 14: 16
[illegible]pomangium clavipes, Juniperus 28:[illegible]
[illegible]pomangium germinale, Crataegus holmesiana 25:540
[illegible]pomangium globosum, hawthorn 29:[illegible]
[illegible]pomangium juniperi-virginianae, Juniperus sp. 28:[illegible]; 29: [illegible]
Heterodera marioni, abaca 18:[illegible], [illegible]
Heterodera marioni, begonia 24:168
Heterodera marioni, cowpea 33:[illegible], 639, 640, 641
Heterodera marioni, Nicotiana plumbaginifolia 36:349
Heterodera marioni, pineapple 19: 614; 26:[illegible], 411, 412; 31:657
Heterodera marioni, potato 8:[illegible]
Heterodera marioni, Rheum rhaponticum 24:168
Heterodera marioni, rice 24:941
Heterodera marioni, strawberry 10: 95; 20:920
Heterodera marioni, sugarcane 15: 560, 561
Heterodera marioni, sweet potato 8:169; 17:504
Heterodera marioni, Thunbergia laurifolia 24:168
Heterodera marioni, tobacco 36:350
Heterodera marioni, tomato 4:325; 31:[illegible]
Necrophoma tumefaciens, Populus trichocarpa 5:185, 186
Nematodes, wheat 9:181
Peridermium cerebroides, Pinus radiata 19:381
Peridermium cerebrum, Pinus radiata 10:255
Peridermium harknessii, Pinus [illegible]
Peridermium harknessii, Pinus radiata 6:227, 228
Peridermium sp., Pinus sylvestris [illegible]
Pestalozzia sapodillae, sapodilla 10:[illegible], 386, 387, 388
Phomopsis sp., black jack oak 28: [illegible]

PHOMOPSIS (Cont'd.
Phomopsis sp., black oak 28:[illegible], 407
Phomopsis sp., blueberry 28:[illegible]
Phomopsis sp., chestnut oak 28:404, 405
Phomopsis sp., elm 31:542, 543
Phomopsis sp., hickory 28:404
Phomopsis sp., jasmine 31:542
Phomopsis sp., Jasmium nudiflorum 26:[illegible]; 28:407
Phomopsis sp., Ligustrum vulgare 28:[illegible]
Phomopsis sp., maple 31:543, 546
Phomopsis sp., privet 28:407; 31: 543
Phomopsis sp., red oak 28:404, 405
[illegible] 1120; 28:[illegible], 407
Phytomonas beticola, beet 21:15, 16
Phytomonas savastanoi, Forsythia [illegible]
Phytomonas savastanoi, Olea saponaia 31:362
Phytomonas savastanoi, Olea ferruginea 31:362
Phytomonas savastanoi, Olea laurifolia 31:362
Phytomonas savastanoi, Olea verrucosa 31:362
Phytomonas savastanoi, Osmanthus americanus 31:362
Phytomonas savastanoi, Osmanthus [illegible]
Phytomonas tumefaciens, Abies concolor 32:1009
Phytomonas tumefaciens, Abies firma 32:1009
Phytomonas tumefaciens, Abies holophylla 32:1009
Phytomonas tumefaciens, Cunninghamia lanceolata 32:1008
Phytomonas tumefaciens, Podocarpus elongata 32:1008
Phytomonas tumefaciens, Sequoia gigantea 32:1008
Phytomonas tumefaciens, Sequoia sempervirens 32:1003
Phytomonas tumefaciens, Taxus baccata var. erecta 32:1006
Phytomonas tumefaciens, Taxus brevifolia 32:1006
Phytomonas tumefaciens, Torreya californica 32:1006
Pseudomonas savastanoi, Adelia acuminata 12:[illegible]

TUMEFACTION (Cont'd.)
Pseudomonas savastonoi, Chionanthus virginica 12:278
Pseudomonas savastonoi, Fraxinus velutina 12:278
Pseudomonas savastonoi, Jasmium primulinum 12:278
Pseudomonas savastonoi, Ligustrum ovalifolium 12:278
Pseudomonas savastonoi, olive 2:104; 18:518; 24:308
Pseudomonas savastonoi, Osmanthis aquifolium 12:278
Pseudomonas savastonoi var. nerii, Adelia acuminata 18:518
Pseudomonas savastonoi var. nerii, Chionanthus virginica 18:518
Pseudomonas savastonoi var. nerii, oleander 18:518
Pseudomonas tumefaciens, poplar 4:201
Rhizoctonia sp., apple 33:256
Sphaeropsis tumefaciens, lime 1:64
Sphaeropsis tumefaciens, orange 1:64
Sorosporium reilianum, corn 23:399
Synchytrium fragariae, strawberry 39:150
Tilletia tritici, wheat 22:848
Tilletia tumefaciens, Panicum antidotale 34:144
Urocystis brassicae, cabbage (sarson) 28:135, 136
Urocystis coralloides, Turritis glabra 28:137
Uromyces hobsoni, Jasmium grandiflorum 29:784
Ustilago zeae, corn 16:986, 989, 990, 994; 19:895, 908
Mycelia Sterilia
Maple 34:133
Potato, "bube" disease 33:1087
Viruses
Big vein, lettuce 24:1254; 32:543
Citrus convex gum, Citrus sinensis 33:395
Citrus corky bark, citrus 33:861
Peach wart, peach 33:22, 24
Sugarcane Fiji disease, sugarcane 11:336
Tobacco virus, tobacco 37:581
Tomato big bud, tomato 23:643; 30:867

TUMEFACTION (cont'd.)
Non-parasitic
Apple, girdling with wire 22:192
Apple, arsenic injury 1:92
Bean, indoleacetic acid 26:709, 710, 711; 27:1111, 1112
Bean, growth substance from dead Bacterium tumefaciens [illegible]
Citron x watermelon 35:481
Rose, a callus formation 41:196
Sugarcane, chemical injection 39:490, 491
Tobacco, indoleacetic acid 26:710
Tomato, indole-3-acetic acid 32:767
Parasitic Seed Plant
Citrus, Cuscuta spp. 39:617

UREDIA
Kuehneola uredinis 40:201
Melampsora lini 32:660, 661; 40:236
Puccinia anomala 20:876, 877, 878
Puccinia antirrhini 27:114; 41:540, 545
Puccinia coronata 9:314; 37:412
Puccinia graminis avenae 32:1089
Puccinia graminis tritici 9:88; 10:168; 17:725 (color); 22:497, 500, 501, 511, 514, 516, 519; 25:721, 1047, 1056; 33:336, 484, 487, 887, 888, 894; 34:888, 889, 893, 896; 39:389
Puccinia graminis tritici, race 189 32:721, 722
Puccinia graminis tritici-compacti 8:145, 146; 9:88
Puccinia orbicula 18:198
Puccinia psidii 28:158, 163
Puccinia purpurea 21:526, 536, 541
Puccinia sorghi 12:94; 17:825
Puccinia triticina 16:120; 20:612; 24:1046; 26:238
Tranzschelia punctata (?) 21:136, 138, 139
Uromyces striatus 32:1049, 1052, 1053, 1054
Uromyces vignae 14:78

VARIEGATION
Antirrhinum majus 33:651
Euphymus radicans 33:641
Hedera helix 33:641

[illegible]
[illegible] japonica 36:473
[illegible] japonica 33:[illegible], 347
[illegible] 39:[illegible]
[illegible] 39:[illegible]
[illegible] sp. 39:[illegible]

[illegible]GATION, EFFECT OF TEMPERATURE ON
[illegible]sta japonica 36:473

[illegible]NING
[illegible]
32:794
[illegible]rmor medicaginis var. capsici, [illegible]
[illegible]rmor medicaginis var. capsici, [illegible]
[illegible]rmor medicaginis var. solani, Nicotiana rustica 37:794
Vermor melonis, muskmelon 37:810, [illegible]
[illegible]
Alfalfa mosaic, pepper 40:968
Asparagus bean virus, asparagus bean 32:519
Currant virus, currant 29:370
Plum line-pattern, plum 35:993
Rape virus, Chinese cabbage 30:339
Rape virus, turnip 30:339
Tobacco virus, tobacco 25:381
Tobacco veinbanding, tobacco 29:56

[illegible]WILTING
Fusarium oxysporum f. lycopersici, tomato 39:698
Fusarium oxysporum f. matthioli, Matthiola sp. 39:401
Vermor dipsacum, teasel 41:192
Viruses
Apricot virus, apricot 32:120
Cherry virus, cherry 31:485
Citrus quick decline, citrus 41:788
Crotalaria incana mosaic, Crotalaria incana 40:514
Pea virus 1, pea 27:246, 248
Pea virus 3, alsike clover 27:[illegible]
Pea virus 3, pea 27:712
Peach yellows, peach 26:204
Pear stony pit, pear 29:263
Potato mild mosaic, Nicotiana [illegible] 20:48

[illegible]WILTING (cont'd.)
Viruses (cont'd.)
Potato yellow dwarf, tomato 41:[illegible]
Potato virus A, Nicotiana glutinosa 29:43
Rape virus, turnip 30:339
Sugar-beet curly top, sugar-beet 9:414; 18:690; 27:774
Tobacco streak, burdock 38:422

[illegible]DISCOLORATION
Bean virus, bean 33:744

[illegible]ESCENCE
Aspergillus flavus, corn 28:812, 813
Aster yellows virus, Phlox drummondii [illegible]
Sugar-beet curly top virus, sugar-beet 35:695

VIRUS MORPHOLOGY
Amaryllis mosaic 41:88
Cabbage black-ring 40:959(?), 960 (note rod-like structures in preparations from healthy plants 40:959)
Cucurbit mosaic 37:38
Nicotiana virus 6 29:254
Odontoglossum ring-spot 41:661
Pea (Wisconsin) streak 40:1002, 1003, 1005
Pseudomonas tabaci, phage 1 40:938, 941, 944
Pseudomonas tabaci, phage 2 40:938, 940, 942
Tobacco leaf curl 39:226, 227; 41:36
Tobacco mosaic 26:312; 29:254; 30:669, 670; 32:295; 37:28, 30, 32, 35, 36, 74; 38:955; 41:80, 82, 84, 88, 89
Tobacco mosaic, rib-grass strain of, 31:1094
Tobacco mosaic, yellow mutant strain of, 37:74
Tomato bushy-stunt 38:950, 952, 953
Xanthomonas pruni phage 38:908, 909; 40:877

VIRUS STUDIES, MISCELLANEOUS
Blood (precipitation) test for field identification of viruses 27:725

VIRUS SORTING, IMMUNOLOGICAL (Cont'd.)
Recovery of neutralized virus by pepsin digestion 26:954
Recovery of x-virus antibody 26:962
Ring and flocculation precipitation tests 25:698
Sedimentation diagrams from ultracentrifuges tobacco necrosis virus 29:87

WEAK AND PROSTRATE PLANTS
Ditylenchus dipsaci, onion 30:332

WHITE RUST (See: Sorus)

WILT
Alternaria solani (toxic principle of), tomato 41:1107, 1108
Bacillus aroideae, tobacco 21:974
Bacillus carotovorus, potato 27:107
Bacillus musae, banana 1:48
Bacterium flaccumfaciens, bean 16:7, 22
Bacterium solanacearum, tobacco 34:877
Bacterium solanacearum, tomato 11:456
Ceratostomella fimbriata, coffee 41:180
Ceratostomella ulmi, elm 41:49
Chalara quercina, oak 34:639
Chalara quercina, toxic extracts of, oak 39:434
Colletotrichum solanicolum, eggplant 7:226
Corynebacterium insidiosum, alfalfa 36:765
Erwinia amylovora, ooze of, pear 29:151
Erwinia carotovora, Cattleya sp. 33:81
Fusarium batatatis, sweet potato 4:304
Fusarium batatis, sweet potato 4:320
Fusarium bulbigenum var. lycopersici, tomato 30:87; 33:127, 131, 1007, 1008, 1010, 1011; 34:354
Fusarium cubense, banana 9:339 (color); 16:375, 378, 381, 384
Fusarium cubense, toxic extract of, 9:366
WILT (Cont'd.)
Fusarium eumartii, potato 6:322
Fusarium lycopersici, tomato 8:9, 10, 12; 12:432
Fusarium niveum, muskmelon 23:556
Fusarium oxysporum, potato 9:260
Fusarium oxysporum, Solidago sp. 18:606
Fusarium oxysporum f. barbati, Dianthus barbatus 31:1034
Fusarium oxysporum f. rhois, Rhus [illegible]
Fusarium roseum, snapdragon 41:546
Fusarium solani, f. martii, bean 40:679
Fusarium solani, f. martii, pea 40:672, 679
Fusarium tracheiphilum, cowpea 21:980
Fusarium udum var. crotalariae, Crotalaria intermedia 41:716
Fusarium udum var. crotalariae, Crotalaria lanceolata 41:716
Fusarium vasinfectum, cotton 17:753
Ganoderma lucidum, coconut 26:155
Helminthosporium victoriae, extracts of, oat 39:505
Phyllosticta unguirrhini, snapdragon 10:256
Phytomonas medicaginis var. phaseolicola, bean 34:474
Phytomonas tumefaciens, filtrate from, tomato 37:304
Phymatotrichum omnivorum, watermelon 25:563
Phytophthora cactorum, sesame 38:754
Phytophthora cactorum, snapdragon 24:616
Phytophthora capsici, pepper 40:747
Phytophthora capsici, squash 30:974
Phytophthora cinnamomi, avocado 38:125
Phytophthora nicotianae, tobacco 23:607
Pratylenchus pratensis, tobacco 38:529, 530, 531
Puccinia coronata, oat 39:305
Rhizoctonia sp., Matthiola incana 31:88
Sclerotinia libertiana, delphinium 6:255

WILT (Cont'd.)
Sclerotinia libertiana, sunflower 13:497
Sclerotinia sclerotiorum, potato 27:1161
Thielaviopsis basicola, cotton 32:788
Verticillium albo-atrum, avocado 39:679
Verticillium albo-atrum, boysenberry 40:1105, 1106
Verticillium albo-atrum, pepper 22:890
Verticillium albo-atrum, sugar-[illegible] 30:970
Verticillium albo-atrum var. cretum, eggplant 24:907
Verticillium albo-atrum var. cretum, tomato 41:987
Viruses
Curly top of sugar-beet, squash 28:654
Pea streak, pea 39:838, 839
Peach rosette, peach 26:207
Spotted wilt, Cineraria sp. 34:945
Spotted wilt, pea 26:919
Spotted wilt, tomato 24:946
[illegible]
Bean (genetic) 15:735
Polysaccharides in nutrient solution, tomato 39:49
Insect
Mealy bug, pineapple 23:209, 210, 211, 213, 216, 236, 237; 29:321; 37:886, 887, 343, 345; 36:766

X-DISEASE (See: Cell Inclusions)

YELLOWS
Anguillulina dipsaci, parsley 25:1006
Aspergillus flavus, corn 28:812, 813
Bacterium dieffenbachiae, Dieffenbachia picta 29:961
Fusarium bulbigenum var. batatas, tobacco 33:476
Fusarium conglutinans var. betae, sugar-beet 21:60, 61, 62
Fusarium lini, flax 16:951, 961
Fusarium medicaginis var. Ladino, Ladino clover 39:518

YELLOWING (Cont'd.)
Phytomonas medicaginis var. pisicola, bean 32:248; 34:474
Phytomonas primulae, Primula polyantha 26:1054
Pseudomonas tabaci, soybean 35:858
Pythium arrhenomanes, sorghum 32:1035
Sphaceloma sp., Mentha spp. 28:104
Thamnyces striatus, alfalfa 32:1052
Verticillium albo-atrum, boysenberry 40:1106
Viruses
Aster yellows, endive 32:804
Aster yellows, gladiolus 38:582
Aster yellows, Phlox drummondii 38:742
Bean yellow mosaic (gladiolus strain), bean 40:849
Carnation 35:58
Cherry mild rusty mottle, cherry 37:78
Cherry yellows, cherry 32:715; 33:450, 456; 38:510
Citrus tristeza, mild strain of, citrus 41:116
Citrus tristeza, severe strain of, citrus 41:109, 116
Cucumber mosaic, Commelina communis 25:951
Cucumber mosaic, tobacco 24:740
Cucumber mosaic, strain 6 of, Commelina communis 25:955
Grape 35:941
Lettuce brown blight, lettuce 30:55
Lily necrotic fleck, lily 34:532
Pea mottle, cucumber 32:109
Peach asteroid spot, peach 28:279
Peach calico, peach 34:652
Peach yellows, peach 28:493
Potato calico, pepper 29:930
Potato leaf roll, potato 8:518
Potato yellow dwarf, Nicotiana glutinosa 28:395
Solanum virus 4, Datura stramonium 23:175
Strawberry virus, strawberry 16:425; 23:355
Sugar-beet yellow-net, sugar-beet 38:430
Sugar-beet yellow-net, swiss chard 38:452
Tobacco mosaic, tobacco 26:73, 74, 76

WING (Cont'd.)
uses (cont'd.)
Tobacco mosaic, leaf-shriveling strain of, tomato 32:987
Tobacco mosaic, strain [illegible] of, tobacco 28:682
Tobacco mosaic, strain N41 of, tobacco 28:681
Tobacco mosaic, strain N88 of, tobacco 28:688
Tobacco ring-spot, tobacco 31: 524
Tobacco yellow mosaic, tobacco 33:1047, 1048
Non-parasitic
Bean (genetic) 40:850
Insect
Leafhopper feeding, alfalfa 26:1062; 28:274

[illegible]
[illegible]cellates in plants 14:151; 15: 293

Acrobeloides buetschlii
  captured by fungus 31:765
Acrostalagmus obovatus
  conidia 31:733
  [illegible]
  conidiophores bearing conidia 35:814
Actinomyces ipomoea (See also: Streptomyces ipomoea)
  lesions 30:935
  proof of pathogenicity 30:916, 919, 921
  root lesions, sweet potato 30:924
  root rot, sweet potato 30:916
 scabies (See also: Streptomyces scabies)
  control, seed treatment 8:458, 460, 461, 462, 463
  disease measurement 28:891
  disease resistance 28:887; 29:205, 206, 208
  ground rot, sweet potato 19:190
  growth in culture 9:423; 16:531; 31:715, 716
  pathological histology 3:257, 258, 260, 262, 263; 31:705
  pathogen in tissue 3:262; 31:707, 709, 710, 711, 712, 713
  scab, potato 2:140; 28:882; 30:699
 [illegible]
  antagonistic to other organisms 40:546; 41:1088
Malayan [illegible]
  abscission of leaf, Pseudomonas sp. 30:653
  [illegible]
Aedikum butleriana
  acetin 9:574
Agaricus campestris
  antagonistic to other fungi 29:730, 731, 735
  macroscopic mycelium 29:732
  mushrooms 20:78
[illegible] (See also: [illegible]; Bacterium
  tumefaciens; Pseudomonas tumefaciens)
  control, by sucrose 41:956
Albugo blitii f. amaranthus
  oospores 29:622
 cuneiformis
  oospores 29:620
 candidae alba
  chlorosis, spinach 29:618
  intumescence, spinach 29:615
  oospores 29:620
  spore 29:618
Alternaria alii
  leaf spot, onion 17:132
  conidial germination 17:132
  conidial morphology 17:132
 brassicae
  damping-off cabbage 35:1004
 [illegible]
  leaf spot, cabbage 41:821

Alternaria citri
leaf spot, citrus 27:864
citri var. cerasi
conidiophores bearing conidia 7:195
fruit rot, orange 7:190
leaf spot, cherry 7:189
compacta
blight, castor bean 34:226, 227
growth in culture 34:223
leaf spot, castor bean 34:228
proof of pathogenicity 34:226, 227
cracca
conidia 7:336
fruit rot, Datura sp. 7:330
growth in culture 7:335
leaf spot, Datura sp. 7:329
cucumerinum (See: Macrosporium cucumerinum)
longipes
conidia 21:651
disease resistance, tobacco 21:647
growth in culture 21:654
leaf spot, tobacco 21:643, 646; 33:356
macrospora
canker, cotton 31:665
conidia 31:667
nelumbii
conidia 11:138
leaf spot, lotus 11:140
radicina
conidia 12:162, 165
root rot, carrot 12:166
ricini
blight, castor bean 35:250, 251
conidia 35:252
dieback, castor bean 35:250
leaf abscission, castor bean 35:251
leaf spot, castor bean 35:254
losses 37:186
solani
blight, potato 15:286
canker, tomato 35:26; 41:133
chlorosis, tomato 41:1105
conidia 7:336; 15:286; 33:730
disease measurement 33:703; 35:26; 35:1013
fruit spot, tomato 34:342
growth in culture 7:317, 335; 19:534; 33:618, 730
infection, influence of air temperature, tomato 41:129, 131, 133
leaf spot, potato (atypical) 13:101
leaf spot, tomato 41:129, 131
leaf spot, tomato (toxic principle of fungus) 41:1107, 1108, 1109
pathogen in host 34:342
pathological histology, potato 18:740
tuber rot, potato 15:286
wilt, tomato (produced by toxic principle of fungus) 41:1107
tenuis
conidia 8:100

fruit spot, tomato 34:542
leaf spot, tomato
pathogen in host, tomato 34:540
zinniae
conidia 43:370
emerging conidiophores from stoma 35:375
flower spot, zinnia 43:373
leaf spot, zinnia 33:373
sp.
blight, Hevea sp. 37:610
canker, apple 17:787
chlamydospores 26:535, 537
conidial germination 28:446
conidial morphology 4:331; 12:147; 28:446
conidiophores and conidia 26:535, 536, 537; 37:610
control, ultraviolet light 36:105
fruit rot, apple 18:571
fruit rot, tomato 26:532, 533, 544
fruit spot, apple 4:336
growth in culture 26:540
pathological histology 26:534
macroscopic mycelium 26:532, 533
microscopic mycelium 4:330
Aneguillulina dipsaci
distortion, garlic 25:1028
distortion, strawberry 26:607, 608
morphology 27:686
pathogen in host, garlic 25:1023
pathogen in host, parsley 25:1008
yellowing, parsley 25:1004
pratensis
fasciculation, apple 26:1129
morphology 26:1130, 1131, 1132
pathogen in host, apple 26:1132
root lesions, apple 26:1129
tumefaction, pineapple 26:412
tumefaction, yam 24:165
Anguina sp.
distortion, Jimson weed 40:837
distortion, tobacco 40:837
sp. var. phaseoli
anthocyanescence, bean 40:834
chlorosis, bean 40:834
distortion, bean 40:834
distortion, Jimson weed 40:837
leaf spot, bean 40:834
leaf spot, cucumber 40:834
ring-spot, Jimson weed 40:836
ring-spot, tobacco 40:836
tobacco 39:355
tobacco 39:355
top-necrosis, Cyanopsis sp. 39:348

Ascochyta macrospora (See also: Septoria apiicola)
butt rot, celery 34:93
conidiophores and conidia 34:96
conidial germination 34:96
conidial morphology 34:96
crown rot, celery 34:95
fruit rot, apple 34:95
growth in culture 34:93
stem lesions, celery 34:95
Aphanomyces cladogamus
parasitizing other organisms 36:673, 674, 678; 41:677, 684, 685
cochlioides
damping-off, sugar-beet 34:494
losses 34:486, 809
pathogenicity demonstrated 34:494
root rot, sugar beet 34:487
fragariae
blight, Asplenium nidus 36:893
bulb rot, narcissus 22:927
distortion, chrysanthemum 23:623
distortion, strawberry 28:588
stunting, strawberry 28:588
parietinus
bud development delayed, cotton 26:699
bulb rot, narcissus 22:927
pathogen in host, cotton 26:699
pathogen in host, rice 24:925
Aphelenchus avenae
morphology 26:295
pathogen in host 26:295
Aplanobacter agropyri
bends in stem, Agropyron sp. 6:350
growth in culture 6:350 (color)
gummosis, Agropyron sp. 6:343
ooze 6:342
pathogen in host 6:350
pathological histology 6:350
stewartii
growth in culture 8:442; 30:277
Armillaria mellea
growth in culture 31:804, 829; 36:306; 41:675, 679
growth in culture, influenced by temperature 36:306
infection, influenced by soil temperature, apricot 36:310, 312
infection, influenced by soil temperature, geranium 36:311, 313
infection, influenced by soil temperature, peach 36:312
infection, influenced by soil temperature, pepper tree 36:314
mushrooms 19:870; 41:675
mycelial mat 36:314
rhizomorphs 4:322; 10:470; 19:870; 31:804; 36:305, 307; 41:675
root lesions, orange 36:307
root rot, apricot 36:312
root rot, geranium 36:313
root rot, orange 36:307
root rot, peach 36:312
root rot, pepper tree 36:314
tuber rot, potato 4:322

Ascochyta [illegible]
[illegible]
[illegible]
fruit spot, okra 40:1057
leaf spot, okra 40:1057
pelargonii
conidia 19:932
chrysanthemi
blight, chrysanthemum 39:799
flower spot, chrysanthemum 39:799
excitans
conidia 19:953
imperfecta
canker, alfalfa 35:839
canker, red clover 35:839
canker, sweet clover 35:839
conidia 19:932
fruit spot, alfalfa 35:839
growth in cult. 35:841
pycnidia 32:592, 595; 35:839
root rot, alfalfa 35:839
root rot, red clover 35:839
root rot, sweet clover 35:839
stem lesions, alfalfa 32:592; 35:839
lathyri
conidia 19:932
lycopersici
conidia 6:365
leaf spot, tomato 6:365
pycnidia 6:365
[illegible]
conidia 32:260
leaf spot, lily-of-the-valley 32:260
pycnidia 32:260
medicaginis
conidia 19:932
phaseolarum
conidia 19:932
piniperda
blight, Picea sp. 4:72
conidia 4:65
pycnidia 4:66
[illegible]
conidia 19:932
growth in cult. 39:948
pisi
conidia 17:397; 19:932
fruit spot, Vicia sp. 37:210
growth in cult., effect of chemicals on 40:157
leaf spot, pea 17:397
leaf spot, Vicia sp. 37:209, 211
stem lesions, Vicia sp. 37:210
pisi var medicaginis
conidia 19:933

Ascochyta vicia-[illegible]sthyroidis

Ascochyta sp.
canker, pea 16:276
Ascochytella pentstemonii
conidia 31:196
pycnidia 31:196
stem lesions, Penstemon spectabilis 31:196
Aspergillus alliaceus
growth in cult. 24:290
sclerotia 24:290
flavus
stunting, soybean 35:12
virescence, corn 28:812, 813
yellowing, corn 28:812, 813
niger
bulb rot, onion 19:734, 735, 736
tuber rot, potato 9:44
sclerotiorum
conidiophores and conidia 23:307
fruit rot, apple 23:307
growth in cult. 23:307
sclerotia 23:307
Aspergillus sp.
conidiophores and conidia 6:266
Asterocystis radicis
conidiophores and conidia 20:678, 679
Atkinsonella hypoxylon (See: Ephelis borealis)
Atropellis pinicola
apothecia 20:558, 567
asci and ascospores 20:567
pycnidia 20:567
treleasei
asci and ascospores 20:567

Bacillus amylovorus (See also: Erwinia amylovora)
blight, apple 3:276; 21:902
blight, cherry 5:316
blight, pear 5:316; 6:292
blight, Spiraea sp. 21:91
blight, Yakimine 6:292
canker, apple 6:403
fruit spot, walnut 21:221
growth in cult. 5:316
morphology 17:406
ooze 6:402; 22:658
pathogen in host 3:5, 14
pathogenicity demonstrated, apple 3:276
vascular necrosis, pear 6:292

[illegible]
[illegible] 14:460
[illegible] 14:464
soft rot, tobacco 14:469
tuber rot, potato 18:888
wilt, tobacco 15:974
[illegible] "C"
dissemination by scale insects 32:192
growth in culture 38:189
morphology 42:169
carotovorus (See also: Erwinia carotovora)
cracking, potato 27:108
pathological histology, potato 20:226
stump rot, cabbage 20:886
tuber rot, potato 18:888; 20:225; 27:108
wilt, potato 27:107
dianthi
pathogen in host, sugar-beet 5:342
[illegible]
tuber rot, potato 18:821, 888
mamulans
distortion, sugar-beet 7:239
morphology 7:237
musae
pathological histology, banana 1:48
wilt, banana 1:48
phytophthorus (See also: Erwinia phytophthora)
tuber rot, potato 18:888
subtilis
infection, influenced by association of organisms 39:101
[illegible] sp.
pathogen in host, corn 10:493
Bacterium angulatum (See also: Pseudomonas angulare)
leaf spot, tobacco 11:452; 24:382; 27:207, 208; 30:277; 34:149
pathogen on root, wheat 34:171
aroidae (See also: Erwinia aroideae)
fruit spot, tomato 14:451, 452, 453
campestre (See also: Xanthomonas campestris)
soft rot, cabbage 10:83
vascular necrosis, cabbage 10:82
citri (See also: Pseudomonas citri)
stem lesions, Citrus sp. 7:342
stem lesions, grapefruit 7:342
stem lesions, Zanthoxylum sp. 7:340, 341, 342
citripestale
fruit spot, lemon 3:280
fruit spot, orange 3:280
coronafaciens var. atropurpureum
leaf spot, brome grass 13:486
cucumbitae
leaf spot, cucumber 22:310
dieffenbachiae
leaf spot, Dieffenbachia sp. 29:901

Bacterium dieffenbachiae (cont'd.)
yellowing, Dieffenbachia sp. 29:961
erodii
leaf spot, Erodium sp. 4:232
leaf spot, Pelargonium sp. 4:232
growth in cult. 4:232
flaccumfaciens (See also: Phytomonas flaccumfaciens)
fruit spot, bean 16:22
growth in cult. 16:15
seed spot, bean 16:22
wilt, bean 16:7, 22
lachrymans (See also: Pseudomonas lachrymans)
Field dissemination of pathogen (smut), cucumber 3:830
malvacearum (See also: Xanthomonas malvacearum)
cotyledon spot, cotton 30:680
leaf spot, cotton 22:264
marginatum
growth in cult. 37:351, 353
morphology 37:353
scab, gladiolus 23:803
phaseoli (See also: Xanthomonas phaseoli)
growth in cult. 16:15
pseudotsugae
tumefaction, Pseudotsuga spp. 30:624
punctulans
fruit spot, tomato 23:898, 900
leaf spot, tomato 23:899
radiobacter (See also: Agrobacterium leguminosarum, Pseudomonas radiobacter)
pathogen in host, Lupinus sp. 36:626
savastonoi (See also: Pseudomonas savastonoi)
tumefaction, olive 2:104; 24:308
sojae
blight, soybean 11:340
seed spot, soybean 11:340
solanacearum
control, by rotation 34:377
distribution map 7:156
effect of temperature on disease development, tomato 11:456
morphology 22:373
pathogen in host 22:373
root rot, peanut 22:373
wilt, tomato 11:456
stewartii (See also: Phytomonas stewartii)
infection influenced by host nutrition, corn 25:219, 230, 230
radioautographs, corn 41:799
tabaci (See also: Phytomonas tabaci, Pseudomonas tabaci)
effect of temperature on disease development, tobacco 11:456
leaf spot, catnip 14:180
leaf spot, cucumber 14:180
leaf spot, lamb's quarters 14:180
leaf spot, maple 14:180
leaf spot, ladies'-thumb 14:180
leaf spot, pokeweed 14:180
leaf spot, prickly pear 14:180

...tatum tabacum (cont'd)
...leaf ... [illegible] 24:240
...leaf spot, ... of 24:
...leaf spot, tobacco 4:280
tobacco (See also Pseudomonas tabaci)
...infection influenced by seasonal movement 30:835, 870
leaf spot, chemical 14:170
leaf spot, tobacco 27:201, 296, 300, 30:76, 77, 78, 82:85, 344, 34:107, 190, 191, 35:1084
morphology 20:160, 191
pathogen on seed, wheat 24:71
pathological histology 27:795, 795, 796, 798
wilt tobacco 34:577
tardicrescens (See also Phytomonas tardicrescens)
hydrosis, iris 28:648
leaf spot, iris 28:643, 644
streak, iris 28:644
trachiphilum
disease resistance, cucumber 28:997
tumefaciens (See also Agrobacterium tumefaciens; Pseudomonas t...
accumulation of starch in host 12:270
control by colchicine 29:825, 827
control by penicillin 35:522
control by chemicals 31:26, 32
disease resistance, plum 6:194
disease resistance, prune 6:194
morphology 20:130
pathogen in host, apple 16:808
pathogen in host, castor bean 13:401, 488; 15:451
pathogen in host, Cupressus 23:39
pathogen in host, tobacco 15:451
pathogen in host, tomato 20:825
pathological histology 23:98; 24:932, 935, 954, 935, 986, ...
...
apple 15:[illegible]08, 16:808, 18:891, 22:172, 188, 187
Arctostaphylos sp. 26:401
bean 26:[illegible]11, 718
begonia 16:497, 505
boysenberry 34:230
castor bean 13:98, 15:451, 16:494, 503, 23:98
cauliflower 15:98
Cupressus sp. 23:98
dairy 1:10, 15:90, 20:220, 32:28
geranium 15:451
Hippocrepis sp. 9:808
Kalanchoe sp. 34:260
marigold 29:827, 32:38, 32
Mirabilis sp. 29:285
Opuntia sp. 34:951
peach 1:10, 6:194, 30:429, 435
pear [illegible] 41:964, 965
plum 6:194
poplar 4:401
prune 6:194
raspberry 15:451

Bacterium tumefaciens (cont'd.)
tumefaction (cont'd.)
rose 9:209; 15:96, 97; 15:541
rubber 15:451
sunflower 31:140, 143, 144, 146; 33:67, 97
sugar-beet 1:10; 15:98
Taxus sp. 23:154
tobacco 13:116; 15:451
Bacterium vascularum
ooze 10:430
vesicatorium
fruit spot, tomato 13:514
vesicatorium raphani
canker, radish 20:654
leaf spot, cabbage 20:656
leaf spot, pepper 20:655
leaf spot, radish 20:654, 655
leaf spot, tomato 20:656
vignae
canker, cowpea 34:440
Bacterium sp.
canker, bean 10:125
canker, hop 25:438
fruit rot, pineapple 16:360, 362
fruit rot, pepper 12:516
growth in cult. 29:855
leaf spot, soybean 10:125, 126
leaf spot, tung 20:757
leaf spot, velvet bean 10:74
ooze, hop 25:438
pathogen in host, pepper 12:512, 514
tumefaction, Gypsophila sp. 22:984
Balansia hypoxylon
pathogen in host 20:674
stunting, Aristida sp. 20:673
Beauveria bassiana
conidial germination 21:1120
conidial morphology 21:1120
growth in cult. 21:1117
growth on insect 21:1117
globulifera
conidial germination 21:1120
conidial morphology 21:1120
Beauveria sp.
phialides 21:1122
Blakeslea trispora
conidiophores and conidia 17:182
Botryosphaeria berengeriana
growth in cult. 6:588
stromata [illegible]
zibia
fruit rot, grape 38:251
Botryotinia fuckeliana
macroscopic mycelium 38:442

[illegible]
growth in culture 40:750, 758, 759, 765, 764
growth in culture, effect of chemicals on 26:569, 573; 40:735, 762
sclerotia 40:757, 765
[illegible]
conidia germination 15:709
conidia morphology 15:709
[illegible]
blight, Anthracnose sp. 29:652
canker, lupine 38:320
conidial germination 3:174
conidial morphology 3:174
conidiophores and conidia 3:174; 6:365
cytological study of 22:956
flower spot, cyclamen 38:115
fruit rot, apple 16:487; 26:787
fruit rot, lime bean 40:230
growth in culture 21:1147; 22:958, 960; 26:569, 573
leaf spot, calla 14:154
leaf spot, cyclamen 14:154; 38:115
leaf spot, Pelargonium sp. 14:154
leaf spot, Rubus spectabilis 14:154
leaf spot, vetch 34:246
macroscopic mycelium 31:441; 40:229
mycelial fusions 3:174
mycelial mat 33:320
penetration, external cells, snapdragon 29:652
sclerotia 3:174; 21:1147
stem lesions, vetch 34:246
tuber rot, potato 23:994, 995; 31:441
wilt, lupine 33:320
elliptica
conidiophores and conidia 38:752
leaf spot, gladiolus 38:733
gladiolorum
infection, influenced by air temperature, gladiolus 39:263, 264
macroscopic mycelium 39:266
sclerotia 39:263
mali
growth in culture 21:1147
sclerotia 21:1147
squamosa
conidial germination 15:721
conidial morphology 15:711
Botrytis sp.
canker, tomato 9:297
conidia 6:365
flower spot, tomato 6:365
fruit rot, apple 26:790, 791
fruit rot, cucumber 28:226
fruit rot, tomato 10:499; 28:226
macroscopic mycelium 9:297
Brachycorium trifolii
acervuli 10:436
sp.
conidia 10:437

Briosia azaleae (See: Sporocybe azaleae)
Buronema sp.
captured by fungus 31:774

- C -

Calonectria graminicola
asci and ascospores 3:242
conidia 3:49, 242
conidiophores and conidia 3:242
perithecia 3:242
Cenangium abietis
apothecia 1:182; 11:167
canker, Pinus sp. 1:182
piniphilum
apothecia 11:294
Centrospora acerina (See also: Ameteospora macrospora)
growth in cult. 41:1026
growth in cult., influenced by light 41:1026
Cephaleuros (virescens) mycoidea
fruit spot, orange 28:284, 285
virescens
fruit spot, guava 31:96
leaf spot, guava 31:96
Cephalobolus longicaudatus
morphology 24:921
striatus
bulb rot, narcissus 22:927
Cephalosporium acremonium
pathogen in host 26:966
balanoides
conidia 31:785
capturing nematodes 31:785
carpogenum
growth in cult. 21:1143
cinnamomeum
chlamydospores 30:971
conidiophores and conidia 30:971
growth in cult. 30:971
leaf spot, Nephthytis sp. 30:969
leaf spot, Syngonium sp. 30:969
deformans
wilt, Lonchocarpus sp. 40:41
dieffenbachiae
leaf spot, Dieffenbachia sp. 32:173
diospyri
abscission (of leaves), Diospyros sp. 40:308
macroscopic mycelium 40:308
pathological histology 40:308

[illegible]
conidiophores and conidia 38:794
growth in cult. 38:794
leaf spot, [illegible] 38:794
leaf spot (Cercothodium sp. 38:794
[illegible]
aerial photo of losses, soybean 38:794
conidiophores and conidia 38:794
growth in cult. 38:794
pathogen in host, soybean 38:794
pathological histology 38:794
reinbanding, soybean 38:794
Cephalosporium sp
canker, Abies sp. 27:789
conidiophores and conidia 27:791
distribution map 40:311
Ceratostomella fimbriata
canker, coffee 41:180
conidia 41:181
cytological study of 15:422
control, sweet potato 38:477
growth in cult. 39:553, 554; 41:180
pathogen in host 41:181
proof of pathogenicity 39:558
perithecia 39:553, 554, 549; 41:181
root rot, sweet potato 38:477
wilt, coffee 41:180
pilifera
pathogen in host 11:219, 224
radicicola
pathogen in host 31:1125, 1127
pathological histology 31:1125
proof of pathogenicity 31:1125, 1126
root rot, date palm 31:1125
stem rot, date palm 31:1126
ulmi
antagonism to other fungi 38:86
coremia 37:925, 926, 927
dissemination studies 34:1027; 41:147
pathological histology 30:523; 32:449
root grafting, elm 25:1040
streak, elm 25:1040
symnema 37:926
wilt, elm 41:49
ulmi, race B
growth in cult. 35:683
growth in cult., influenced by temperature 35:682
sp.
pathogen in host 11:217, 218
Cercospora apii
disease resistance, celery 36:981
arachidicola
conidial morphology 23:633
conidial germination 23:634

Cercospora arachidicola (cont'd)
leaf spot, peanut 25:635
pathogen in host 25:636
sporodochia 23:636
bataticola
leaf spot, sweet potato 21:95
beticola
conidia 24:1107
cotyledon rot, beet 8:126
leaf abscission, beet 8:124
pathological histology 18:728, 729
carotae
conidiophores and conidia 33:116
leaf spot, carrot 33:115; 34:607
pathological histology 33:116
stem lesions, carrot 33:115
cladosporioides
fruit spot, olive 34:258
growth in cult. 34:258
spermatia 34:258
spermagonia 34:258
synnema 34:258
cruenta
conidia 14:355; 24:1107
leaf spot, Phaseolus aureus 14:353
davisii
conidia 24:1107
dubia
conidia 24:1107
duddiae
conidia 13:364
fabae
leaf spot, Vicia sp. 37:175, 176
shot-hole, Vicia sp. 37:175
festucae
conidial germination 40:1026
conidial morphology 40:1025
conidiophores and conidia 40:1025
emerging conidiophores, stomata 40:1025
leaf spot, brome grass 40:1024
leaf spot, fescue grass 40:1024
[illegible]
conidial germination 41:309
conidial morphology 41:309
conidiophores and conidia 41:309
leaf spot, soybean 41:307
proof of pathogenicity 41:307
seed spot, soybean 41:307
stem lesions, soybean 41:307
lathyrina
leaf spot, Lathyrus sp. 31:1032
leaf spot, Pisum sp. 31:1032
medicaginis
leaf spot, bur-clover 11:316
seed spot, bur-clover 11:316

Cercospora melongenae
conidia 18:66
leaf spot, eggplant 18:62
musae
black tip, banana 19:532, 534
leaf spot, banana 19:535
nicotianae
leaf spot, tobacco 33:356; 35:1024
oryzae
disease resistance, rice 33:73
leaf spot, rice 27:1006; 30:1043
seed discoloration, rice 27:1006
personata
conidia 23:633, 638
haustoria 23:634
leaf spot, peanut 23:635
pathogen in host 23:634
sporodochia 23:638
physalidis
conidia 24:1107
sequoiae var Juniperi
sporodochia 35:186
setariae
conidia 24:1107
symplocarpi
pathological histology 18:737
thujina
blight, Thuja sp. 35:183
canker, Thuja sp. 35:182, 183
conidia 35:186
leaf abscission, Thuja sp. 35:183
pathological histology 35:186
sporodochia 35:186
Cercosporella albo-maculans
leaf spot, cabbage 17:370
brassicae
conidia 38:897
leaf spot, cabbage 38:894
leaf spot, turnip 38:894
pathological histology, cabbage 38:896
paagena
conidia 32:738
persica
frosty mildew, peach 27:691
Chalara quercina
conidia 34:633; 39:434
dissemination study 39:428
distribution within host 37:741
endospores 34:632
growth on culture 34:632, 641
pathogen in host 39:433
pathological histology 34:641; 39:433
root grafts 34:639
vascular necrosis 34:641

Chalara quercina (cont'd.)
wilt, oak 34:63
wilt, caused by extracts of culture 39:434
Chalaropsis thielavioides
canker, rose 30:794
conidial germination 30:803
conidial morphology 30:798
conidiophores and conidia 25:652; 30:798
disease resistance, rose 36:285
failure of grafts, rose 36:282
growth in culture 30:800
pathogen in host 30:795
pathological histology 30:795
proof of pathogenicity 36:282
Chilonectria cucurbitula
blight, jack pine 37:759
dieback, jack pine 37:759
pathological histology 37:759
perithecia 37:759
Choanephora cucurbitarum
blight, Amaranthus blitum 14:494
conidiophores and conidia 29:899, 900
fruit rot, cowpea 29:899
fruit rot, squash 29:900
macroscopic mycelium 29:899, 900
sporangia 29:899
persicaria
conidial germination 15:609
conidial morphology 15:609
Cladosporium carpophilum
conidial germination 18:326
penetration, external cells, Prunus sp. 18:317, 318
cucumerinum
blight, cucumber 40:1095, 1097
disease resistance, cucumber 40:1097
leaf spot, cucumber 40:1097
infection, influenced by temperature, cucumber [illegible]
effusum
control (fungicides), pecan 38:922
fulvum
conidiophores and conidia 40:1031
disease resistance, tomato 32:902
malorum
conidia 21:1148
growth in culture 21:1143
paeoniae
blotch, peony 27:173
conidiophores and conidia 27:173, 176, 178
flower spot, peony 30:410
growth in culture 27:173, 176
leaf spot, peony 30:410
pisicolum
conidia 24:893
fruit spot, pea 24:892, 893, 895
growth in culture 24:893

Cladosporium musicolum (cont'd.)
leaf spot, pea 24:893
seed transmission, pea 24:893, 895
stem lesions, pea 24:892
canker, conidia 15:402
fruit spot, conidia 15:402
growth in culture 15:402
leaf spot, conidia 15:402
conidia 15:840
conidiophores and conidia 4:190
dissemination by scale insects 32:102
Clasterosporium carpophilum
disease resistance, histological demonstration of, Prunus sp. 36:830
Clavaria musicola
mushrooms 8:210
Claviceps paspali
conidia, Paspalum sp. 38:557
purpurea
perithecia 1:52
sclerotia 1:52
stroma 1:52
purpurea plus Tilletia tritici
sclerotia 28:145
suppression, wheat 28:145
yanagawaensis
asci and ascospores 32:810
perithecia 32:810
sclerotia 32:809, 810
Clitocybe tabescens
control, by banking of soil, citrus 32:533
macroscopic mycelium 31:94; 32:488
mushrooms 38:48, 49
pathological histology 38:50, 51, 54
rhizomorphs 32:488, 489, 491
root lesions, citrus 38:52
stroma 38:52, 54
Clonostachys araucaria var. rosea
conidia 9:40
conidiophores and conidia 9:40
tuber rot, potato 9:44
Coccomyces hiemalis
ethylene produced from diseased leaves, cherry 40:207
Kerria
asci and ascospores 7:402, 403, 404
acervulus 7:401
ascomata 7:402, 403
ascospore germination 7:404
conidial germination 7:404
conidial morphology 7:404
leaf spot, Kerria sp. 7:401
stem lesions, Kerria sp. 7:401

Coccomyces pini
pycnidia 3:130, 132, 133
prunophorae
pathological histology 18:724, 725
leaf spot, Rhododendron sp. 10:278
Coleodictyospora cubensis
conidia 19:1052, 1053
Coleosporium crowellii
pathogen in host 28:522
telia 28:522
Colletotrichum atramentarium
pathogen in host 16:28
sclerotia 16:34, 37, 40
falcatum
acervulus 34:834, 835
appressoria 34:830, 833
leaf spot, sorghum 40:436
leaf spot, sugarcane 34:832
pathogen in host 34:830, 833, 834, 835
pathological histology 34:829, 833, 834, 835
penetration, external cells, sugarcane 34:833
penetration, internal cells, sugarcane 34:830,
stem lesions, sugarcane 34:832
stem rot, sugarcane 34:210, 211; 40:433
vascular necrosis, sugarcane 34:829
fragariae
acervuli 21:741, 743
anthracnose, strawberry 21:740
conidia 21:741, 743
pathological histology 21:741
higginsianum
conidia 25:271
root rot, turnip 25:271
lagenarium
growth in culture 37:585
proof of pathogenicity 37:592
lilii
acervulus 34:567
bulb rot, lily 34:557; 37:195
conidia 34:567
control, fungicides 36:392; 37:195
pathogen in host 34:558
pathological histology 34:558
proof of pathogenicity 34:562
lindemuthianum
anthracnose, bean 5:309, 310; 8:614
disease measurement 8:614
disease resistance, bean 1:194; 8:614; 37:405
fruit rot, bean 31:571
fruit spot, bean 8:614
growth in culture 12:390
infection, influenced by moisture content of air,
bean 37:405
proof of pathogenicity 37:405

Colletotrichum lini
disease resistance, flax 35:690
nigrum
conidia 16:545
sclerotia 16:545
phomoides
acervulus 38:254
leaf spot, tomato 34:977
growth in culture 38:243
pathogen in host 38:240
pathological histology 38:240
penetration, external cells, tomato 38:239, 240
proof of pathogenicity 38:235
pisi
acervulus 11:500
fruit spot, pea 11:502
leaf spot, pea 11:502
penetration, external cells, pea 11:502
stem lesions, pea 11:502
schizanthi
acervulus 1:122
conidial germination 1:122
conidial morphology 1:122
solanicolum
wilt, eggplant 7:226
trifolii
infection, influenced by age of host tissues, clover 24:804
infection, influenced by host nutrition, clover 24:800, 801
truncatum
acervulus 41:979
appressoria 41:979
conidial germination 41:979
conidial morphology 41:979
fruit spot, lima bean 25:123, 124
fruit spot, soybean 41:977
pathogen in host 41:977, 981, 982
pathological histology 41:982
penetration, external cells, soybean 41:979
penetration, internal cells, soybean 41:981
sclerotia 25:124
seed discoloration, lima bean 25:124
setae 41:979
stem lesions, soybean 41:977
villosum
anthracnose, vetch 35:978, 980
conidial germination 35:985
conidial morphology 35:980
growth in culture 35:983
leaf spot, vetch 35:978, 980
proof of pathogenicity 35:982
stem lesions, vetch 35:980

Colletotrichum sp.
acervulus 16:345
anthracnose, tobacco 35:599
blight, hydrangea 19:1123
blight, peony 19:1123
conidial germination 16:345
conidial morphology 16:345
fruit rot, papaya 31:571
stem lesions, tobacco 35:599
Collybia dryophila
growth in culture 22:283, 292
velutipes
growth in culture 31:829
mushrooms 11:392, 398
pathological histology 11:400
Coniophora cerebella
clamp connections 33:982
conidia 33:982
growth in culture 33:980
Coniothyrium fuckelii (See also Leptothyrium seminibyrinus)
black root, strawberry 21:1041, 1043, 1047, 1054
canker, apple 1:102
canker, rose 1:102
growth in culture 1:102
pycnidia 1:102; 21:1055; 30:451
rosarum
blight, rose 9:404, 409
pycnidia 9:410, 411
stem lesions, rose 9:404, 405, 410
sp.
canker, apple 17:737
conidia 21:253
pycnidia 25:885
Coriolus prolificans
mushrooms 8:615, 616
Corticium areolatum
appressoria 30:124
basidia and basidiospores 30:124
basidiospore germination 30:124
growth in culture 30:123
leaf spot, orange 30:121, 127
macroscopic mycelium 30:121, 124, 125
pathogen in host 30:124, 128
penetration, external cells, orange 30:124
sclerotia 30:123, 124
galactinum
basidiospore germination 30:143
clamp connections 30:143
growth in culture 30:143, 146
growth in culture, influenced by temperature 30:146
macroscopic mycelium 30:144
root rot, apple 30:144
root rot, Rubus allegheniensis 30:144

Corticium koleroga
basidia and basidiospores 17:704; 23:879
basidiospore germination 17:704; 23:878, 879
growth in culture 23:881
entrance through stoma, coffee 23:882
macroscopic mycelium 23:875, 877
mycelial fusions 23:879
pathogen in host 17:709; 23:879, 880
rhizomorphs 17:690, 692, 695
scald, citrus 17:694, 695
sclerotia 17:697, 698, 700, 702, 703, 709; 23:877
laetum
macroscopic mycelium 1:16
microsclerotia
abscission of leaves, bean 29:560
blight, bean 29:562
blight, tung 34:649
basidiospore morphology 29:564
basidiospore germination 29:564
fruit spot, bean 29:563
growth in culture 29:567
growth in culture, influenced by pH 29:567
growth in culture, influenced by temperature 29:567
leaf spot, bean 29:562
leaf spot, tung 34:649
macroscopic mycelium 29:564, 570, 573
proof of pathogenicity 29:570
sclerotia 29:562, 563, 570, 573
praticola
basidia and basidiospores 19:1091, 1092
growth in culture 19:1064, 1077
solani
canker, Gizania sp. 39:1053
crown rot, Gizania sp. 39:1053
disease measurement 35:387
growth in culture 35:376
root rot, sugar-beet 35:386
sclerotia 35:376, 385
stem lesions, bean 35:382
stem lesions, potato 35:385
vagum
basidia and basidiospores 19:1091; 29:374
[illegible]
growth in culture, influenced by temperature 29:567
root lesions, potato 7:211
vagum var. solani
canker, potato 5:62
macroscopic mycelium 4:203
pathogen in host 5:62
pathological histology 5:62
sclerotia 5:62
Corynebacterium agropyri (See: Aplanobacter agropyri)
flaccumfaciens (See: Bacterium flaccumfaciens; Phytomonas flaccumfaciens)

wilt, alfalfa 36:765
growth in culture 33:1034
ring rot, potato 36:238
Coryneum asperulum
acervulus 36:776
conidia 36:776
pathological histology 36:776
beijerinckii
acervulus 30:593, 596
blight, apricot 33:507
conidia 30:593, 596
control 30:598
fruit spot, apricot 33:507
growth in culture 30:596; 32:225
growth in culture, influenced by temperature 32:225
leaf spot, Prunus spp. 32:223
shot hole, apricot 33:507
shot hole, Prunus spp. 32:223
cardinale
conidia 30:596
growth in culture 30:596
carpophilum (See: Clasterosporium carpophilum)
microstictum var. staphyleae
acervuli 21:1164
conidial germination 21:1164
conidial morphology 21:1164
haustoria 21:1164
pathogen in host 21:1164
Cronartium coleosporoides
ooze 7:138
spermogonia 7:138
tumefaction, Pinus sp. 7:138
comandrae
ooze 7:137
spermogonia 7:138
tumefaction, Pinus sp. 7:137
comptoniae
distribution map 19:455
haustoria 19:742
pathogen in host 19:742
fusiforme
basidiospore morphology 37:859
telia 37:859
teliospore germination 37:859
teliospore morphology 37:859
tumefaction, slash pine 33:34
quercum
haustoria 32:793
pathogen in host 32:793
tumefaction, Pinus sp. 32:786, 793

tumefaction, Pinus sp. 4:7,10
ribicola
abscission of leaves, Ribes sp. 29:983
sp.
aecia 8:439; 25:254
appressoria 29:34
canker, Pinus sp. 25:254
canker, white pine 19:276
[illegible]
[illegible]
[illegible]
white pine 41:278
distribution map 7:21; 25:1107
entrance through stomata, currant 28:34
leaf spot, currant 29:31
parasitism by other fungi 25:254
pathogen in host 29:34; 41:279
pathological histology 29:34; 41:278
telia 26:924
teliospores 26:924
uredospore germination 8:291
uredospore germination, affected by light 8:291
strobilinum
aecium 12:122
uredinium 12:122
Cryptodiaporthe castanea
canker, Castanea sp. 28:695
perithecia 28:695
pycnidia 28:695
Cryptosporella viticola
asci and ascospores 1:118
mummification, grape 3:21
perithecia 1:118
pycnidia 3:21
Cunninghamella mainecksalla
blight, Pinus sp. 31:1065
conidiophores and conidia 31:1073
growth in culture 31:1073
pathogen in host 31:1075
pathological histology 31:1066, 1073
proof of pathogenicity 31:1073
Cuscuta spp.
haustoria 34:924
tumefaction, citrus 39:617
Cycloconium oleaginum
conidia 39:408
pathogen in host 39:406, 408
pathological histology 39:406, 408
Cylindrocarpon angustum
conidia 16:627
cylindroides
conidia 3:242
mali
conidia 3:242
macrosporum
conidia 18:221

Macrosporium sesquarium
canker, rose 7:411
conidial germination 7:413
conidial morphology 7:413
conidiophores and conidia 7:412
Cystopus bliti
oospores 4:62
Cytospora batatas
ground rot, sweet potato 15:288, 289, 292
[illegible]
Cytospora canisia littoralis
canker, Cupressus sp. 31:898
growth in culture 31:899
resinosis, Cupressus sp. 31:898
stromata 31:898, 899
[illegible]
cirrhi 30:468
growth in culture 30:466, 468
pycnidia 30:466, 469, 462
Cytospora sp.
distribution map 31:897
ooze 11:162, 164
pycnidia 11:162, 164
stromata 31:899

- D -

Dacromyces sp.
growth in culture 30:882
Dactylella spermatophaga
[illegible]
fusion of germ tubes 28:96
growth in culture 28:85
Dasyscypha calycina
apothecia 27:54
fuscosanguinea
apothecia 19:584
canker, white pine 19:582, 584
[illegible]
conidia 28:807
macroscopic mycelium 24:827; 28:807
pathogen in host 28:807
seed spot, pea 24:827
Dematophora sp.
growth in culture 26:251
Dendrophoma obscurans
growth in culture 38:701, 702
pycnidia 38:701
Diaporthe arctii
perithecia 21:78, 79

Diaporthe batatatis
asci and ascospores 2:123
conidia 2:121
pycnidia 2:121
stroma 2:122
Diaporthe batatatis var. sojae
[illegible]
citri
antagonistic to other organisms 25:764
growth in culture 25:760
crotalariae
asci and ascospores 23:603
canker, Crotalaria sp. 23:597, 598, 599
perithecia 23:599, 603
eres
canker, rose 25:886
juglandis
perithecia 13:421
phaseolarum
growth in culture 37:451
phaseolarum var. batatatis
asci and ascospores 38:630
growth in culture 39:630, 631
[illegible]
ooze 38:630
perithecia 38:630, 631; 41:331
phaseolarum var. sojae
asci and ascospores 38:629
blight, soybean 37:446
fruit rot, okra 37:451
fruit rot, pepper 37:451
fruit rot, tomato 37:451
fruit spot, bean 37:446
fruit spot, cowpea 37:446
growth in culture 37:451; 38:631
perithecia 37:466; 38:629, 631
pycnidia 37:446, 451
seed discoloration, cowpea 37:447
stem lesions, bean 37:446
stem lesions, cowpea 37:446
stem lesions, lima bean 37:446
stem lesions, peanut 37:446
stem lesions, soybean 37:446
[illegible]
asci and ascospores 30:443
growth in culture 30:442
perithecia 30:442
vexans
asci and ascospores 32:541
perithecia 32:540
[illegible]
growth in culture 39:94
[illegible]
asci and ascospores 30:967

Cytosporina ribicola
rust, Lecythocarpus sp. 40:35, 38
Didymella applanata
ascospore germination 21:279
ascospore morphology 21:279
blight, raspberry 21:250, 252, 253, 257
canker, raspberry 21:256
pathogen in host 21:256, 277, 279
perithecia 21:252, 256, 257
Didymellina iridis
ascospore germination 10:157
entry via stomata, iris 10:152
perithecia 10:156
Didymosphaeria oregonensis
asci and ascospores 21:915
perithecia 21:914
Dilophospora alopecuri
blotch, wheat 15:18
conidial germination 10:244
conidial morphology 15:23, 24
galls, wheat 14:15
growth in culture 15:25
pycnidia 15:18, 22
stripe, wheat 15:18
suppression, wheat 15:19, 20
Diplocarpon earliana
haustoria 24:625
leaf spot, strawberry 24:625; 31:227
[illegible]
Fusa
ethylene production from diseased leaves 40:207
Diplodia caribaea
growth in culture 12:418
frusenti
conidial germination 20:736
conidial morphology 20:442, 736, 737; 23:66
ear rot, corn 20:734
pycnidia 20:734, 735
[illegible] (See also: Physalospora rhodina)
bulb rot, onion 36:246
conidial germination 36:566
[illegible]
conidial morphology 15:340; 22:375; 36:247
growth in culture 15:340
pathogen in host 36:247
pathological histology 22:375
pycnidia 22:375; 36:246
pinea
canker, Pinus spp. 33:1029
theobromae (See also: Physalospora rhodina)
conidial germination 36:566
conidial morphology 36:566
dieback, guayule 36:568
[illegible]
pycnidia 36:566

D. macrospora
conidial germination 20:442
conidial morphology 20:442
[illegible]
pycnidia 20:441

Diplodia tuberosella
conidia 20:737
zeae
conidia 20:442
cytological study of 29:68, 69, 70
disease resistance, corn 28:501, 502, 505
ear rot, corn 24:153
growth in culture 29:68; 30:1048; 33:605
growth in culture, effect of chemicals on 30:1048; 33:603
pycnidia 28:68, 69, 70; 30:980
sclerocospores 29:68, 69, 70; 30:980
[illegible]
control, seed treatment 33:603
growth in culture 29:1054
stem rot, Phoenix sp. 20:340, 342
Dyplodina delphinii
chlamydospores 40:618
growth in culture 40:623
pycnidia 40:618
Dytylenchus destructor
root rot, sugar-beet 41:873
[illegible]
bulb rot, onion 30:383
control 30:395
distortion, onion 30:395
distortion, sweet clover 33:525
dwarfing, sweet clover 33:525
pathogen in host 33:62, 63
pathological histology 33:62, 63
weak, prostrate plants, onion 30:392
dipsaci var. amsinckiae
pathogen in host, Amsinckia sp. 30:46, 48, 50
pathogen in host, Hypochaeris sp. 30:51
pathological histology 30:46, 48, 50, 51
tumefaciens, Amsinckia sp. 30:42, 47
Dothidiza caroliniana
conidia 37:491
leaf spot, blueberry 37:491
pycnidia 37:491
caryae
pycnidia 12:383
populea
canker, poplar 13:246
Elsinoe ampelina
conidia 19:675
growth in culture 26:69, 192
perithecia 19:676

Elsinoe australis
acervulus 28:74
scab, citrus 28:74
canavaliae
asci and ascospores 23:664
perithecia 19:677
scab, lima bean 23:664
colichi
asci 35:344
conidia 35:345
growth in culture 35:344, 345
pathogen in host 35:344
pathological histology 35:344
scab, Dolichos sp. 35:342, 344
fawcetti (See: Sphaceloma fawcetti)
ascomata 26:395
asci and ascospores 26:395
conidia 26:395
growth in culture 35:344
scab, citrus 26:395
ledi
acervulus 21:968
anthracnose, Ledum sp. 21:966, 968; 23:374
perithecia 21:966, 968, 969
parthenocissi
ascomata 32:425
asci and ascospores 32:425
canker, Parthenocissus sp. 32:425
leaf spot, Parthenocissus sp. 32:424
phaseoli
growth in culture 35:344
piri
distribution map 36:460
fruit spot, apple 36:459
leaf spot, apple 36:459
leaf spot, pear 36:459
randii
acervulus 28:76, 77
anthracnose, pecan 28:76
ascomata 28:76
growth in culture 28:77
solidaginis
distribution map 29:971
perithecia 29:973
pathological histology 29:973
Helicosporidiopsis fimbriata (see: Cercosporella fimbriata; Sphaeronema fimbriatum)
virescens
dieback, maple 34:1071
microscopic mycelium 34:1073
pathogen in host 34:1073
pathological histology 34:1070, 1073
proof of pathogenicity 34:1072
Endothia parasitica
canker, chestnut 3:304

Endothia parasitica (cont'd.)
disease resistance, chestnut 40:1129
distribution map 4:287
growth in culture 3:304; 5:44
growth in culture, crystals from 8:495
intumescence, chestnut 5:234
pathological histology 4:193, 198
perithecia 4:280
pycnidia 3:304
Entomophthora coronata
conidial germination 38:119
conidial morphology 38:120
Entyloma ellisii
chlamydospores 41:856
Ecoronartium musicola
basidiospore germination 8:202, 203
mushrooms 8:218
pathogen in host 8:201, 218
Epholis borealis
conidia 20:674
Erostrotheca multiformis
ascospore germination 18:845
leaf spot, sweet pea 18:845
perithecia 18:845
pseudosclerotia 18:845
Erwinia amylovora (See also: Bacillus amylovorus)
cirrhi 27:703, 705
growth in culture 27:19
morphology 26:442; 27:705; 29:150
ooze 29:143
wilt, caused by ooze 29:151
amylovora f. rubi
blight, raspberry 41:916
ananas
fruit rot, pineapple 40:1133
aroideae (See also: Bacillus aroideae)
fruit rot, pumpkin 28:351, 352, 353
fruit rot, squash 28:351
stem rot, celery 28:355
atroseptica (See: Erwinia phytophthora)
carnegieana
control, penicillin 39:1050
dieback, cactus 32:304
growth in culture, effect of chemicals on 39:1050
morphology 32:309
pathogen in host 32:308, 309
pathological histology 32:306, 308, 309: 39:1038
plant necrosis, cactus 39:1030
proof of pathogenicity 39:1037
stem lesions, cactus 32:305
stem rot, cactus 39:1031
carotovora (See also: Bacillus carotovorus)
canker, potato 16:160, 161
growth in culture 16:164; 33:406; 34:761; 35:522
pathogen in host 37:237

Erwinia carotovora (cont'd.)
pathological histology 16:176; 37:230, 236, 237
petiole lesions, celery 35:141
proof of pathogenicity, guayule 37:299
ring rot, potato 36:238
soft rot, spinach 34:748
tuber rot, potato 16:151, 152, 153, 162; 17:156, 157, 159; 37:227, 230
wilt, Cattleya sp. 33:81
dissolvens (See: Phytomonas dissolvens)
phytophthora (See also: Bacillus phytophthorus)
infection, influenced by absence of crop rotation, larkspur 33:808
infection, influenced by lack of moisture, larkspur 33:807
plant necrosis, larkspur 33:807
wilt, delphinium 27:856
tracheiphila (See: Bacterium tracheiphilus)
Erwinia sp.
coze 37:273
pathogen in host, guayule 37:273
pathological histology 37:273
root lesions, guayule 37:273
soft rot, Sansevieria sp. 34:351
stem lesions, guayule 37:273
Erysiphe cichoracearum
asci and ascospores 31:537
conidia 31:537
conidiophores and conidia, diurnal cycle of spore maturation and abscission 30:66
disease measurement 32:888
disease resistance, cantaloupe 32:997
disease resistance, cucumber 38:1027
macroscopic mycelium 32:416, 888
perithecia 31:537; 32:416
powdery mildew, cantaloupe 32:888, 997
powdery mildew, cucumber 18:855; 38:1026
powdery mildew, lettuce 31:536
powdery mildew, squash 20:360
powdery mildew, sunflower 2:203
stem lesions, cantaloupe 32:997
graminis
blotch, barley 20:970
disease resistance, loss of, wheat 24:1046
haustoria 18:902, 905
infection, influence by soil temperature, barley 41:625
macroscopic mycelium 24:739, 1046
pathogen in host 18:903
perithecia 24:739
powdery mildew, barley 24:739; 41:625
powdery mildew, wheat 24:1046
graminis hordei
conidiophores and conidia 20:235, 236, 237
disease resistance, barley 20:235; 27:54
powdery mildew, barley 27:54, 59

[illegible]
asci and ascospores 23:810
perithecia 23:813
powdery mildew, crepe myrtle 23:815
suppression, crepe myrtle 23:815
martii
disease resistance, histological demonstration of, Trifolium sp. 36:628
polygoni
conidia 18:613
[illegible]
infection, influenced by pH, cowpea 20:684
powdery mildew, bean 26:1136, 1237; 39:785
sclani
powdery mildew, potato 26:393
sp.
perithecia 33:746
powdery mildew, Homocladium sp. 33:746
Eutypa heteracantha
conidia 28:744
Eutypella angulosa
conidia 28:746
asci and ascospores 28:744
[illegible]
canker, Acer spp. 28:735, 736
conidial germination 28:744
conidial morphology 28:744
growth in culture 28:742
Exoascus cerasi
fasciculation, cherry 17:20
deformans (See also: Taphrina deformans)
chlamydospore germination 14:220
conidial germination 14:223
conidial morphology 14:221
[illegible]
fasciculation, Prunus sp. 15:215, 220
Exobasidium parvifolii
basidia and basidiospores 17:216
pathogen in host 17:216
tumefaction, Vaccinium sp. 17:209, 211
Exosporina fawcetti
conidial germination 39:342
conidial morphology 39:342
pycnidia 39:341, 342

- F -

Flavimaculs ipomeae
chlorosis, sweet potato 35:696
distortion, sweet potato 35:696
dwarfing, sweet potato 35:697
Fomes applanatus
growth in culture 28:611
growth in culture, effect humidity on 28:611

Fomes applanatus (cont'd.)
histology diseased tissues, Acer sp. 28:604
histology diseased tissues, Populus sp. 28:604
mushrooms 28:357
pathogen in host 28:604
fomentarius
penetration, internal cells, Populus sp. 28:604
igniarius
growth in culture 28:611
growth in culture, effect humidity on 28:611
histology diseased tissues, Populus sp. 28:604
histology diseased tissues, Ostrya sp. 39:479
mushrooms 32:178; 39:479
pathogen in host 28:604
penetration, internal cells, Populus sp. 28:604
officinalis
chlamydospores 11:174
pinicola
growth in culture 33:521, 980
growth in culture, effect chemicals on 33:521
mushrooms 7:427; 33:975
pathological histology 33:975
sp.
foot rot, sugarcane 17:83, 85, 86, 88, 89
mushrooms 17:92, 93
Fusarium acuminatum
growth in culture 19:868
angustum
conidia 14:216
asclerotium
conidia 15:95
fruit rot, peach 15:93, 94
avenaceum
damping-off, Abies sp. 35:431
damping-off, Picea sp. 35:431
damping-off, Pinus spp. 35:428, 431
damping-off, Pseudotsuga sp. 35:431
growth in culture 19:151
pathological histology, potato 29:279
avenaceum var. fabae
conidia 34:391
pathogen in host 38:338
batatatis
conidia 4:283
growth in culture 22:283, 292
root rot, sweet potato 4:304
vascular necrosis, sweet potato 4:304
wilt, sweet potato 4:304
batatis
growth in culture 4:320
pathogen in plant 4:282
pathological histology 4:320
wilt, sweet potato 4:320
bulbigenum var. batatas
yellowing, tobacco 33:476

Fusarium bulbigenum var. lycopersici
conidia 38:958
disease measurement 29:950
disease resistance, tomato 29:949
epinasty, tomato 31:282; 33:1007, 1008, 1011
growth in culture 31:105; 33:183, 184, 618, 956
infection, influence soil moisture on, tomato 36:223
losses 31:759
pathogen in host 34:44
wilt, tomato 30:87; 33:1007, 1008, 1010, 1011; 34:354
coeruleum
conidia 3:49
growth in culture 13:868
root rot, pea 28:435
conglutinans var. betae
yellowing, sugar-beet 21:60, 61, 62
conglutinans var. callistephi
disease resistance, aster 25:740, 742; 27:738
pathogen in host 27:741, 742, 743
pathological histology 27:742, 743
penetration, external cells, aster 27:741
penetration, internal cells, aster 27:741
conglutinans var. majus
disease resistance, aster 25:740, 742
cromyophthoron
conidia 14:216
damping-off, onion 19:262
root rot, onion 19:255
cubense
conidial germination 9:390
conidial morphology 9:390
cracking, banana 9:390
pathological histology 9:355, 390 (color)
proof of pathogenicity, banana 9:390
proof of pathogenicity, cotton 9:371,372
sporodochia 9:390
vascular discoloration, banana 16:386, 388
vascular necrosis, banana 9:390
wilt, banana 9:339 (color); 16:375, 378, 381, 384
wilt, due to toxic products of, banana 9:366
culmorum
antagonism to other fungi 29:730, 733
conidia 14:216; 17:197; 20:623; 39:365
growth in culture 19:149, 150, 868; 39:365
culmorum var. cereale
conidia 39:369
dianthi
antagonism to other fungi 29:733
dimerum
root rot, sugar-beet 26:554
discolor
conidia 14:216
discolor var. sulphureum
conidia 3:49; 14:216

Fusarium equiseti
conidia 39:365
damping-off, Abies sp. 35:431
damping-off, Picea sp. 35:431
damping-off, Pinus sp. 35:431
damping-off, Pseudotsuga sp. 35:431
eumartii
conidia 17:197
pathological histology 6:324
proof of pathogenicity 6:322
stem rot, potato 6:322
tuber rot, potato 6:324
wilt, potato 6:322
falcatum
conidia 3:49
flocciferum
antagonism to other fungi 29:733
conidia 39:365
growth in culture 39:365
fructigenum malus
growth in culture 19:868
gibbosum
conidia 3:49
graminearum
conidia 39:365
growth in culture 19:151; 39:365
proof of pathogenicity 39:365
herbarum gibberalloides
growth in culture 19:868
hyperoxysporum
conidia 4:283
javanicum
fruit rot, pumpkin 28:351, 352, 353
fruit rot, squash 28:351
lateritium v. fructigenum
disease resistance, aster 25:742
lini
growth in culture 7:360
growth in culture, effect nutrition on 7:360
infection, effect of soil type on, flax 27:543
infection, effect source of isolate on, flax 27:534, 543
infection, effect temperature on, flax 7:359
proof of pathogenicity, flax 27:534, 543
yellowing, flax 16:951, 961
lonchacaras
conidia 14:216
lonchecaras var. microsporon
conidia 14:216
lutalatum
conidia 14:216
lycopersici
disease resistance, tomato 8:10; 14:196
infection, effect nutrition on, tomato 38:671
infection, effect pH on, tomato 8:13
microscopic mycelium 14:575, 576, 577, 578, 579
wilt, tomato 8:9, 10, 12; 12:432

conidia 14:216
martii
antagonism to other fungi 29:731, 733
conidia 3:49; 14:216; 17:197
[illegible]
conidia 22:376
growth in culture 19:868; 22:375
root rot, peanut 22:373
sporodochia 22:375
martii var. pisi
canker, pea 16:276
moniliform (sic)
conidia 14:216
moniliforme
conidial germination 23:370
conidial morphology 17:228; 23:370
damping-off, Pinus sp. 4:76
distortion, sugar-cane 19:343, 348, 349, 350, 351, 352, 357, 359, 361, 362, 366 (color)
growth in culture 20:897, 898
leaf spot, Sansevieria sp. 30:528, 530
macroscopic mycelium 31:159
mixochimera 20:897, 900
pathogen in host 33:668; 41:530
pathological histology 33:668
root rot, cotton 17:233; 33:667
stem rot, corn 22:536
stem rot, sorghum 41:530
stunting, cotton 17:231
moniliforme var. subglutinans
conidia 26:687
dwarfing, corn 26:691
[illegible]
nivale
control 24:198, 208
entrance via stomata, grass 24:204
growth in culture 19:151
macroscopic mycelium 24:199, 203
pathogen in host 24:204
snowmold, grass 24:198, 199, 203, 208
sporodochia 24:204
niveum
damping-off, muskmelon 23:555
damping-off, watermelon 23:555
wilt, muskmelon 23:555
orthoceras
conidia 3:49, 242; 4:283
damping-off, Abies sp. 35:431
damping-off, Pinus spp. 35:431
damping-off, Pseudotsuga 35:431
root rot, sugar-beet 26:554, 557
orthoceras f. gladioli
conidia 34:279
dwarfing, iris 35:927

Fusarium orthoceras f. gladioli (cont'd.)
pathogen in host 34:266
pathological histology 34:266
proof of pathogenicity 35:924, 925
rot, Freesia sp. 35:925
rot, gladiolus 34:264, 267
root lesions, gladiolus 34:267
vascular necrosis, gladiolus 34:264, 267
orthoceras var. longius
damping-off, Pinus sp. 35:428
orthoceras var. pisi
dwarfing, pea 21:806
[illegible]
pathological histology 21:830, 831
orthoceras var. triseptatum
conidia 14:216
oxysporum
antagonism to other fungi 29:731
chlamydospores 24:501; 30:183
conidial germination 30:183
conidial morphology 3:49; 4:283; 14:216; 17:197; 24:501; 30:183
control, seed treatment 37:470
damping-off, mushrooms 27:89, 90
damping-off, Pinus sp. 35:428
etiolation, potato 9:260
growth in culture 24:498; 27:80; 30:766
heterotophy, potato 9:260
infection, effect of injury on, flax 37:470
macroscopic mycelium 30:182
microscopic mycelium 38:766
mummification, sweet potato 9:470
pathogen in host 24:501
pathological histology 9:470; 24:501
proof of pathogenicity 37:468, 470
root rot, sweet potato 9:470
sclerotia 24:501
sporodochia 16:624
stem rot, Cereus sp. 24:496, 498
tuber rot, potato 9:260; 30:182
vascular necrosis, potato 9:260
wilt, potato 9:260
oxysporum f. barbati
wilt, Dianthus sp. 31:1054
oxysporum f. batatas (See also: F. batatatis; F. batatis; F. bulbigenum var. batatas)
conidia 29:879
growth in culture 39:879
infection, effect of injury on, sweet potato 39:881
pathological histology 40:770, 772
proof of pathogenicity 39:881
root rot, sweet potato 39:881
sporodochia 39:879
oxysporum f. callistephi
control, chloropicrin, aster 39:274
oxysporum f. cubense (See: F. cubense)

Fusarium oxysporum f. delphinii
canker, delphinium 39:913
chlamydospores 39:915
conidia and conidiophores 39:915
[illegible]
conidia 16:512, 518
corm rot, gladiolus 16:523
oxysporum f. lilii
control, fungicides 34:966, 971, 972
oxysporum var. longious
conidia 14:216
oxysporum f. lycopersici
vein clearing, Mathiola spp. 38:401
vein clearing, tomato 36:692
oxysporum f. mathioli
dwarfing, Mathiola sp. 38:400
oxysporum var. pisi, race 2
disease resistance, pea 39:774
[illegible]
proof of pathogenicity 39:774
oxysporum var. resupinatum
conidia 14:216
oxysporum f. rhois
pathological histology 39:755
proof of pathogenicity 39:757
vascular necrosis 39:755
wilt, Rhus sp. 39:755
oxysporum f. trecheiphilum, race 1
disease resistance, cowpea 40:187
oxysporum f. 6
disease resistance, aster 25:740, 742
perniciosum
proof of pathogenicity 31:603
pirinum
bud rot, peach 15:97
conidia 15:96
fruit rot, peach 15:93, 94
pous
damping-off, Pinus sp. 35:428
radicola
conidia 4:283
radicicola
conidia 14:216
redolens
[illegible]
reticulatum
damping-off, Abies sp. 35:431
damping-off, Pinus spp. 35:428, 431
damping-off, Pseudotsuga sp. 35:431
retusum
chlamydospores 33:958
conidia 33:958
growth in culture 33:956
rhizochromatistes var. microsclerotium
[illegible]
roseum
[illegible]

Fusarium roseum (cont'd.)
infection, effect of temperature on, snapdragon
wilt, snapdragon 41:545
rubiginosum
conidia 3:49
sambucinum
conidia 39:369
sclerostromaton
conidia 14:216
[illegible]
conidia 3:242
growth in culture 19:868
solani
conidia 3:49; 17:197
fruit rot, peach 15:93, 94
growth in culture 19:151
stem rot, potato 30:163
tuber rot, potato 30:163
solani f. batatas
growth in culture 41:74
stem rot, sweet potato 41:74
solani f. cucurbitae
growth in culture 39:135, 136
solani f. fabae
chlamydospores 38:591
conidia 38:591
solani var. martii
control, seed treatment 37:655
dwarfing, pea 40:672
growth in culture 40:669
proof of pathogenicity 37:655; 40:672
root rot, bean 40:678
wilt, bean 40:679
wilt, pea 40:672, 679
solani var. martii, f. 2
conidia 40:667
solani var. martii, f. 3
conidia 40:667
spinaciae
conidia 13:208
striatum
growth in culture 19:868
sublunatum var. elongatum
conidia 39:369
[illegible]
conidia 3:49
tracheiphilum
stem rot, cowpea 21:980
wilt, cowpea 21:980
trichothecioides
conidia 3:49, 242
growth in culture 19:868
trisinctum
growth in culture 19:868
udum var. crotalariae
disease resistance, Crotalaria spp. 41:716

Fusarium roseum var. crotalariae (cont'd)
wilt, Crotalaria spp. 41:716
udum var. pusillum
conidia 3:242
vasinfectum
chlorosis, cotton 17:751, 752
conidia 17:197, 760, 763, 764
disease resistance, cotton 28:209
distribution map 22:771
growth in culture 30:516
pathogen in host 17:756
vascular discoloration, cotton 17:754; 19:173
wilt, cotton 17:753
vasinfectum var. zonatum
bulb rot, onion 31:912
infection, effect nutrition on, cotton 18:420, 421
ventricosum
conidia 3:49, 242
root rot, sugar-beet 26:554
zonatum f. 1
proof of pathogenicity 27:768, 769
rot, onion 27:770
spp.
bulb rot, onion 30:393
chlorosis, celery 25:581
control, fungicides 4:88
coremia 29:996
damping-off, Pinus sp. 4:76, 88
distortion, corn 23:673
distortion, sorghum 23:673
dwarfing, barley 25:316, 322
germination of infested seeds, barley 25:315
growth in culture 25:311, 585
growth in culture, effect temperature on 25:585
growth in culture, effect ultraviolet radiation on [illegible]
infection, effect isolate source on 25:590, 595; 33:480
infection, effect moisture on, celery 25:591
leaf spot, snapdragon 41:545
losses, potato 30:182
microscopic mycelium 6:338
mummification, Agaricus sp. 33:1091
proof of pathogenicity 41:229
root rot, onion 19:697
root rot, sugar-beet 18:939, 940
root rot, sweet potato 41:228, 229
vascular discoloration, cotton 19:173
wilt, cabbage 1:28
Fusicladium photinicola
scab, Christmas berry 15:181
pirina (See also: Venturia pirina)
conidia 15:182
pisicola
conidia 16:558
leaf spot, pea 16:558
pathogen in host 16:558

Fusicoccum putrefaciens
conidia 19:1016
pycnidia 19:1018
pyrorum
canker, apple 13:230
conidia 13:230
pycnidia 13:230
viticolum
pycnidia 1:116, 117

Ganoderma lucidum
chlamydospores 26:158
growth in culture 26:165
gummosis 26:155, 157
mushrooms 26:157, 159
root rot, coconut 26:156
stem rot, coconut 26:156, 157
wilt, coconut 26:155
pulverulentum
mushrooms 17:146
spp.
cytological study of 25:427, 428
Geotrichum sp.
conidiophores and conidia 30:532
growth in culture 30:532
pathogen in host 30:532
Gibbellina cerealis
growth in culture 24:947
splitting of leaves, barley 24:947
splitting of leaves, wheat 24:947
perithecia 24:947
Gibberella baccata
canker, apple 16:624
fujikuroi var. subglutinans
asci and ascospores 26:687
perithecia 26:687
moniliformis
asci and ascospores 23:370
perithecia 23:370, 371
seed rot, corn 23:369
saubinetii
conidia 4:283
saubinetii
conidia 3:49
disease resistance, corn 21:623; 22:678
saubinetti
distribution map 11:116
pathogen in host 11:122, 124
zeae
growth in culture, effect chemicals on 38:1036
Gibellula suffulta
conidia 2:136
synnema 2:136

Gloeosporium aridum
conidial germination 38:449
conidial morphology 38:449
conidiophores and conidia 38:447, 449
growth in culture 38:447
root rot, carrot 38:447
roseum
conidia 38:449
Gloeosporiopsis inconspicua
conidia 37:498
leaf spot, blueberry 37:497
sorghi
conidia 33:223
entrance through stomata, sorghum 33:223
leaf spot, sorghum 33:221
pathogen in host 33:223
sporodochia 33:223
Gloeosporium pomigena
conidia 22:945
growth in culture 22:946
pathological histology 22:947
pycnidia 22:946, 947
Gloeosporium allantosporum
anthracnose, Rubus sp. 19:602
bolleyi
conidia 38:134
cingulatum
acervuli 17:774
blight, raspberry 17:774
canker, raspberry 17:774
fructigenum (See also: Glomerella cingulata)
growth in culture 5:257
gloeosporioides
blight, Citrus spp. 2:234
conidia 2:231
growth in culture 2:234
inconspicuum
disease measurement 24:64
leaf spot, elm 24:64
limetticolum
conidial germination 2:231
conidial morphology 2:231
growth in culture 2:234
necator
anthracnose, Rubus sp. 36:1044
leaf spot, Rubus sp. 36:1044
pycnidia 36:1044
olivarum
acervuli 32:643
fruit rot, olive 32:643
growth in culture 32:643
perennans
canker, apple 22:398, 402; 29:741
piperatum
acervulus 16:345
pathogen in host 16:345

Gloeosporium piperatum (cont'd.)
penetration, external cells, pepper 16:545
rufomaculans
acervuli 1:202
ulmicolum
leaf spot, elm 24:63
venetum
acervuli 23:390
anthracnose, Rubus sp. 36:1044
leaf spot, Rubus sp. 36:1044
pycnidia 36:1044
sp.
acervuli 19:605
anthracnose, tobacco 35:599
growth in culture 19:605
leaf spot, Pholidota sp. 25:436
stem lesions, tobacco 35:599
[illegible] (See also: Gloeosporium [illegible])
anthracnose, lespedeza 36:525
anthracnose, Ligustrum sp. 15:262, 263
anthracnose, peach 41:448
anthracnose, Zizyphus sp. 21:1186
canker, Ligustrum sp. 15:2[illegible]4
canker, lupine 33:251
fruit rot, apple 21:1188; 25:98
fruit rot, fig 21:1188
fruit rot, orange 21:1188
fruit rot, pepper 21:1188
fruit rot, persimmon 21:1188
fruit rot, tomato 21:1188
fruit rot, Zizyphus sp. 21:1188
growth in culture 5:257; 21:1186; 25:94
leaf spot, lespedeza 36:525
leaf spot, lupine 33:251
proof of pathogenicity, Chamaecrista sp. 34:1083
proof of pathogenicity, lespedeza 36:526
proof of pathogenicity, peach 41:448
stem lesions, lespedeza 36:525, 527
[illegible]
canker, soybean 30:345
[illegible]
acervuli 33:670, 671
appressoria 28:791
canker, cotton 31:163
conidial germination 28:791
conidial morphology 28:791
control, fungicides 30:1052
cytological study of 28:791
damping-off, cotton 30:1052
disease resistance, cotton 28:793
fruit rot, cotton 2:26; 31:165
growth in culture 28:788, 790
macroscopic mycelium 31:159
pathogen in host 33:669, 670, 671
pathological histology 33:669, 670, 671
proof of pathogenicity 28:793

Glomerella gossypii (cont'd.)
root rot, cotton 33:667
piperata
conidia 16:345
perithecia 16:345
psidii
endospores 1:200
rubicola
fruit rot, apple 25:98
growth in culture 25:94
stem lesions, raspberry 25:92, 99
rufomaculans
conidial germination 1:200
conidial morphology 1:200
endospores 1:200
fruit rot, apple 1:202; 2:160
fruit rot, pear 1:202
leaf spot, sweet pea 2:160
penetration, external cells, sweet pea 2:158
sp.
ascospore germination 16:345
ascospore morphology 16:345
conidia 16:345
perithecia 16:345
Gnomonia dispora
asci and ascospores 26:1027
ascospore germination 26:1027
blotch, pecan 26:1026
pathological histology 26:1027
perithecia 26:1027
[illegible]
perithecia 3:98
pycnidia 3:98
ulmea
disease measurement 24:68
leaf spot, elm 24:68
veneta
abscission, leaf, sycamore 41:195
sp.
growth in culture 38:702
perithecia 38:701, 702
Godronia cassandrae
apothecia 19:1019, 1020
asci and ascospores 19:1021
ascospore germination 19:1021
Graphium rubrum
synnema 24:301
Guignardia aesculi
asci and ascospores 6:11
ascospore germination 6:11
blotch, chestnut 6:20 (color)
conidial germination 6:11
conidial morphology 6:11
cytological study of 6:21
perithecia 6:20
pycnidia 6:20

Guignardia aesculi (cont'd.,
spermatia 6:1
bidwellii
growth in culture 36:909
pathological histology 18:748
pycnidia 36:909
bidwellii f. muscadinii
blight, grape 36:906, 908
canker, grape 36:908, 909
fruit rot, grape 36:909
growth in culture 36:909
leaf spot, grape 36:906
pycnidia 36:909
bidwellii f. parthenocissi
leaf spot, ivy 38:717
leaf spot, Virginia creeper 38:717
sp.
abscission, fruit, grape 13:518
Gymnoconia interstitialis
aeciospore germination 8:28; 25:459
aeciospore morphology 8:28
appressoria 25:456, 461, 473, 474
cytological study of 25:461, 473, 474
haustoria 25:463, 464
penetration, external cells, Rubus sp. 25:461, 473, 474
penetration, internal cells, Rubus sp. 25:461
teliospores 8:28
Gymnosporangium blasdaleanum
aecia 4:270
fasciculation, cedar 4:265
telia 4:270
clavipes
aecia 29:804, 805
fruit rot, apple 29:804
telia 29:803
tumefaction, Juniper sp. 29:803
[illegible]
aecia 22:724
distortion, apple 22:724
fruit spot, apple 23:548
leaf spot, apple 23:548
[illegible]
tumefaction, Crataegus sp. 23:548
globosum
aecia 29:804
chlorosis, apple 29:804
leaf spot, apple 29:804
spermogonia 29:804
telia 22:725; 29:803
tumefaction, cedar 29:803
juniperi-virginianae
aecia 12:191; 17:541, 542; 23:548; 29:804, 805
basidiospore germination 3:282
canker, apple 17:541
chlorosis, apple 29:804
control, fungicides 2:152, 260

Gymnosporangium juniperi-virginianae (cont'd.)
disease resistance, Juniper sp. 40:877
fruit spot, apple 23:548
leaf spot, apple 29:804
pathological histology 26:800
spermogonia 29:804
telia 22:725; 29:803
transfection, Juniper sp. 26:800; 29:803

-H-

Hainesia lythri
black root, strawberry 21:1042, 1043, 1047, 1054
conidia 21:1057
sporodochia 21:1055
Hapalosphaeria deformans
blight, blackberry 33:137, 139
conidia 33:138
pathogen in host 33:138
pathological histology 33:138
pycnidia 33:139
Harposporium dicerosum
conidia 31:798
nematode-capturing 31:798
helicoides
conidia 31:783
nematode-capturing 31:783
oxycerucum
conidia 31:790
nematode-capturing 31:790
[illegible]
Helminthosporium carbonum, race I
conidia 34:219
leaf spot, corn 34:216
carbonum, race II
conidia 34:219
leaf spot, corn 34:216
carposaprum
conidia 36:990
conidiophores and conidia 36:990
fruit rot, tomato 36:989
infection, effect plant nutrition on, tomato 36:996
infection, effect temperature on, tomato 36:989
dictyoides
growth in culture 25:357
erythrospilum
conidiophores and conidia 25:351, 359
growth in culture 25:355, 358
leaf spot, Agrostis spp. 25:346
sclerotia 25:355
gramineum
conidia 36:1050
conidiophores and conidia 36:1050
cytological study of 25:285, 286
growth in culture 36:1050

Helminthosporium heveae
leaf spot, Hevea sp. 38:1025
maydis
conidia 31:513; 34:219
leaf spot, corn 34:216
maydis, race I
ear rot, corn 31:515
leaf spot, corn 31:514, 516
maydis, race II
ear rot, corn 31:515
leaf spot, corn 31:517
oryzae
infection, influence time of day inoculation performed, rice 37:284
leaf spot, rice 37:284
rostratum
conidia 37:180; 40:96
cytological study of 40:101
leaf spot, corn 37:181
sacchari
canker, napier grass 32:48
conidia 18:774; 28:441; 40:94, 95, 96
cytological study of 40:98
disease resistance, napier grass 28:439, 440, 441
growth in culture 18:763, 764; 31:54, 58, 59, 60
growth in culture, influence of light on 32:58
growth in culture, influence of [illegible] on [illegible]
growth in culture, influence of temperature on 32:54
leaf spot, Cymbopogon sp. 31:188
leaf spot, napier grass 28:439, 440; 32:48
leaf spot, sugarcane 18:769, 774 (color)
pathological histology 31:188
stem lesions, napier grass 32:48
sativum
disease resistance, barley 41:692
disease resistance, wheat 15:787, 792
growth in culture 15:789, 791; 19:158, 160, 616; 23:381, 618; 30:1019, 1026, 1028; 41:1017
growth in culture, influenced by chemicals [illegible]
infection, influenced by association of organisms [illegible]
infection, influenced by age of host tissue 39:110
infection, influenced by distance of inoculum from [illegible]
infection, influenced by soil type 27:543
infection, influenced by source of isolate 27:534, 543
leaf spot, barley 23:382; 24:730
plant necrosis, sweet corn 39:1023
proof of pathogenicity 27:534, 543; 30:1030
sativum, race 2
proof of pathogenicity 39:111, 1023
sativum, race 7
proof of pathogenicity 39:1023
stenospilum
conidia 18:774; 40:96
cytological study of 40:99
torulosum (See: Cercospora musarum)

Helminthosporium [illegible]
leaf spot, Agrostis sp. 25:346
turcicum
conidia 31:513
disease measurement 36:661
ear rot, corn 27:207
growth in culture 30:535
leaf spot, corn 31:512
victoriae
blight, oat 37:791
disease resistance, oat 37:792
growth in culture, influenced by chemicals 38:1036
infection, influenced by moisture content of air, oat 39:310
infection, influenced by method of inoculation, oat 37:798
leaf necrosis, oat 39:301
leaf spot, oat 41:301
proof of pathogenicity 37:792, 794
stripe, oat 39:301
wilt, extract from culture of, oat 39:305
vignae
chlamydospores 35:826
conidiophores and conidia 35:826
leaf-spot, cowpea 35:823, 829
leaf-spot, soybean 35:829
shot-hole, cowpea 35:823
stem lesions, cowpea 35:824
"Z"
growth in culture 39:1021
growth in culture, influenced by nutrition 39:1021
plant necrosis, corn 39:1025
proof of pathogenicity 39:1023
sp.
conidial germination 21:46
conidial morphology 21:46, 58
germination of infested seeds, barley 25:315
growth in culture 21:48, 49, 50; 24:268; 25:311
leaf spot, sugarcane 21:43, 44, 58 (color)
proof of pathogenicity 27:534
root rot, flax 27:541
stunting, barley 25:316, 322
Hendersonia diplodicides
blight, apple 5:58
conidia 5:58
Herpotrichia nigra
asci and ascospores 3:158
conidia 3:158
entrance through stomata 3:158
mycelial mat 3:158
perithecia 3:158
Heterodera marioni
control, soil fumigants 24:1341; 25:72, 79; 30:337; 31:821; 32:628; 34:877; 38:945; 39:586
control, other chemicals 39:593; 40:461, 462
cracking, sweet potato 17:554
disease measurement 31:1100; 32:627; 34:956, 961; 36:343
[illegible]
40:217

Heterodera marioni (cont'd.)
distortion, cowpea leaf 31:641
infection, influenced by presence of Pseudomonas sp., pineapple 29:604
infection, influenced by source of isolate, tobacco 36:350
lesions, aerial photos detect in field, pineapple 29:71, 79
losses, pineapple 24:277, 279
losses, tomato 31:750
morphology 21:329; 29:523, 528, 530, 531, 533, 534, 535, 537, 538, 539, 544, 545; 33:42; 34:181; 35:414, 415; 37:329, 330; 32:583; 36:343
pathogen in host 4:336, 24:916, 931, 932, 933, 939, 940, 941, 31:637, 643, 644; 32:585, 586; 40:217
pathological histology 34:380, 385; 35:8, 10, 11, 13, 14, 16, 19
plant necrosis, cowpea 27:516
scab, sweet potato 17:554
tumefaction, Abaca sp. 18:862, 863
tumefaction, begonia 24:162
tumefaction, cowpea 31:638, 639, 640, 641
tumefaction, Nicotiana sp. 36:349
tumefaction, pineapple 19:614; 26:409, 411, 412; 31:637
tumefaction, potato 8:492
tumefaction, Rheum sp. 24:162
tumefaction, rice 24:941
tumefaction, strawberry 10:95; 20:920
tumefaction, sugarcane 15:560, 561
tumefaction, sweet potato 8:169; 17:554
tumefaction, Thunbergia sp. 24:162
tumefaction, tobacco 36:350
tumefaction, tomato 4:236; 31:636
rostochiensis
cysts 41:890
morphology 36:182, 183, 184, 185
schachtii
morphology 40:137, 140, 142, 144
spp.
losses 38:520, 521
Heterosporium phlei
conidia 9:579
conidiophores and conidia 9:579
leaf spot, timothy 9:577
tropaeoli
canker, nasturtium 40:555
conidial germination 40:556
conidial morphology 40:556
conidiophores and conidia 40:556
conidiophores emerging from host 40:556
leaf spot, nasturtium 40:555
pathogen in host 40:556
penetration, external cells 40:556
seed spot, nasturtium 40:555
Hormodendron cladosporioides
conidia 21:1148
Hypochnus solani
basidia and basisiospores 19:1091

Hypodermella [illegible]
abscission, leaf, Larix sp. 13:535
Hypomyces ipomoeae (See also: Nectria ipomoeae)
asci and ascospores 3:242
chlamydospores 3:242
conidia 3:49, 242
conidiophores and conidia 3:242
perithecia 3:242
rubi
conidia 3:242
sporodochia 3:242
Hypoxylon pruinatum
canker, poplar 14:143; 35:75
conidiophores and conidia 28:517
losses 35:75
mushrooms 35:75
mycelial mat 35:75
perithecia 35:75
stroma 28:516; 35:75

Isaria clonostachoides
conidia 12:170
fruit rot, tomato 12:172
Isariopsis griseola
conidial germination 7:347
conidial morphology 7:347
conidiophores and conidia 7:347
leaf spot, bean 7:347

Keithia thujina
abscission, leaf, Thuja sp. 6:361
apothecia 6:362
asci and ascospores 6:362
shot-hole, Thuja sp. 6:362
Kuehneola uredinis
aecia 40:201
distribution map 40:200
telia 40:201
uredia 40:201

- L -

Lasiodiplodia tubericola
conidial germination 3:166
conidial morphology 3:166
pycnidia 3:166
root rot, sweet potato 3:166
Lasiosphaeria pozizula
pathogen in host 11:215, 224
perithecia 11:215
[illegible] (See also: Gnomonia setacea)
acervuli 31:64, 66
conidia 31:67

Leptinus lepidus
mushrooms 19:706
Lenzites sepiaria
growth in culture 21:935
Leptosphaeria avenaria
ascospore germination 12:453, 470
conidia 13:20
growth in culture 12:457, 458, 470
pathogen in host 12:470
[illegible]
leaf spot, citrus 25:885
perithecia 25:885
Coniothyrium
asci and ascospores 21:253
Leptosphaerulina vignae
[illegible]
leaf spot, cowpea 18:702
Leptothyrium coniothyrium (See also: Coniothyrium fuckelii)
stem lesions, rose 19:1123
[illegible]
fruit spot, pear 8:236
pathological histology 8:239
Lophodermium brachysporum
asci and ascospores 3:134
ascospores 3:135
apothecia 3:133, 134
paraphyses 3:135

— M —

Macrophoma fici
canker, fig 8:25
conidia 8:26
tumefaciens
conidial germination 5:184
conidial morphology 5:184
pathological histology 5:184
pycnidia 5:184
tumefaction, Populus sp. 5:183, 184
[illegible]
growth in culture 36:206
growth in culture, influenced by nutrition 36:[illegible]
Macrophomina phaseoli
blight, bean 28:632
canker, bean 28:628, 630, 631
[illegible]
Macrosporium c[illegible]
leaf spot, carrot 34:697
[illegible]
leaf spot, cucurbits 13:200, 201
horseradicum
conidia 25:271
leaf spot, turnip 25:271
root rot, turnip 25:269
[illegible]
growth in culture 39:[illegible]

Macrosporium sarcinaeforme (cont'd.)
infection, influenced by age of host 24:804
infection, influenced by nutrition of host 24:800, 801
leaf spot, red clover 29:543
solani
foot rot, sweet potato 15:239
fruit spot, tomato 22:613
sp.
canker, tomato 10:416, 417
conidia 10:19, 419
entrance through stomata 10:494
fruit spot, tomato 10:21
stem lesions, tomato 10:21
Marasmius tritici
mushrooms 15:116
pathogen in host 15:115
Marmor conspicuum
chlorosis, Euphorbia sp. 40:267
dipsacum
chlorosis, teasel 41:192
distortion, teasel 41:192
fern leaf, teasel 41:192
vein clearing, teasel 41:192
erodens plus Marmor secretum
dwarfing, tomato 39:642
flavopunctum
chlorosis, bean 40:849
chlorosis, soybean 40:851
distortion, bean 40:847
leaf spot, cowpea 40:851
leaf spot, soybean 40:851
leaf spot, tepary bean 40:851
stem lesions, bean 40:851
leosiofaciens
leaf spot, bean 34:511
rosetting, bean 34:511
stunting, bean 34:511
medicaginis var. capsici
chlorosis, pea 37:784
chlorosis, pepper 37:784
leaf spot, bean 37:784
leaf spot, broad bean 37:784
leaf spot, Nicotiana sp. 37:782
leaf spot, sweet pea 37:782
leaf spot, tobacco 37:782
ring-spot, tobacco 37:782
vein-banding, cucumber 37:784
vein-banding, tobacco 37:782
medicaginis var. Ladino
chlorosis, clover 39:518
chlorosis, pepper 39:522
chlorosis, tobacco 39:522
curl, soybean 39:522
dwarfing, petunia 39:522
dwarfing, soybean 39:522
leaf spot, bean 39:522
yellowing, clover 39:518

Marmor medicaginis var. phaseoli
chlorosis, cucumber 41:969
distortion, cucumber 41:969
leaf spot, bean 41:969
leaf spot, Gomphrena sp. 41:969
vascular necrosis, bean 41:973
medicaginis var. solani
chlorosis, pepper 37:784
veinbanding, Nicotiana sp. 37:784
melonis
chlorosis, melon 37:810, 811
distortion, melon 37:810, 811
veinbanding, melon 37:810, 811
pintofolium
chlorosis, cherry 37:65
secretum
chlorosis, celery 34:81
chlorosis, potato 34:80
distortion, buckwheat 34:82
leaf spot, cantaloupe 34:79
leaf spot, buckwheat 34:82
leaf spot, pokeweed 34:82, 83
leaf spot, potato 34:80
leaf spot, sugar-beet 34:78
virus protects recovered plant from re-
infection by same virus, tobacco 34:83
secretum plus Marmor erodens
dwarfing, tomato 39:642
scillearum
chlorosis, orchid 34:498
terrestre
stunting, oat 36:361, 362
terrestre var. oculatum
leaf spot, oat 36:367
terrestre var. typicum
chlorosis, oat 36:368
tabaci var. rosettae
leaf spot, Nicotiana sp. 41:1095
upsilon
leaf spot, Chenopodium sp. 38:931
leaf spot, Lycium sp. 38:931
leaf spot, Physalis sp. 38:931; 40:446
leaf spot, potato 38:931
Marssonia potentillae
scorch, strawberry 12:376
Marssonina fragariae (See: Diplocarpon earliana)
[illegible]
anthracnose, melon 37:584
conidial germination 37:687
conidial morphology 37:687
growth in culture 37:585
Mealy bug
disease resistance, pineapple 37:337
proof of pathogenicity 38:647

Mealy bug (cont'd.)
wilt, pineapple 23:209, 210, 211, 212, 216, 236, 237; 35:311; 37:337, 343, 345
[illegible]
ascospores 25:214
Melampsichium eleusinis
chlamydospores 37:482
cytological study of 37:482
sorus 37:482, 483
Melampsora farlowii
basidia and basidiospores 29:464
blight, Tsuga sp. 29:463, 464
pathological histology 29:464
telia 29:464
teliospores 29:464
lini
disease resistance, flax 32:660, 661
entrance through stomata 16:193
pathogen in host 16:187
telia 40:236
uredia 32:660, 661; 40:236
uredospores 16:187
lini var. liniperda
disease resistance, flax 20:718, 719
Melampsoropsis sp.
leaf spot, Rhododendron sp. 10:278
Melanconis juglandis
acervuli 13:434
conidia 13:419, 420
dieback, butternut 13:434
Melanconium sp.
acervulus 6:392
conidial germination 6:392
conidial morphology 6:392
fruit spot, tomato 6:391
Melanopsichium eleusinis
basidia and basidiospores 37:482
chlamydospores 37:482, 483
pathogen in host 37:483
suppression, Eleusine sp. 37:482
Meliola guianensis
leaf spot, cocoa 13:248
perithecia 13:249, 250
Meloidogyne spp. (See: Heterodera marioni)
Meria coniospora
conidia 31:790
Merulius lacrymans
growth in culture 31:929
mycelial mat 12:497
Microascus trigonosporus
asci and ascospores 38:969, 971
conidia 38:969
growth in culture 38:971
microscopic mycelium 38:968
pathogen in host 38:969
perithecia 38:969

Microsphaera diffusa
perithecia 30:621
Microstroma juglandis
fasciculation, Carya sp. 7:186
juglandis var. robustum
basidiospore germination 7:44
pathogen in host 7:43
pathological histology 7:43
stromata 7:43, 44
Minuor ruborum
curl, raspberry 33:157
Mollisia earliana
acervuli 12:379
perithecia 12:378
Monilia sp.
dissemination, by beetles 30:230
growth in culture 30:234
Monilia fructicola (See also: Sclerotinia fructicola)
blight, peach 40:1145
conidial germination 40:1140
conidial morphology 40:1140
fruit rot, cherry 37:930
cinerea
fruit rot, cherry 37:930
Monochaetia mali
canker, apple 25:1117
Mucor mucedo
growth in culture 20:960, 961
Musivum tabaci var. plantaginis
chlorosis, Plantago sp. 33:211
chlorosis, tobacco 33:211,
curl, tobacco 33:211
disease resistance, tobacco 33:213
leaf spot, Plantago sp. 33:211
leaf spot, tobacco 33:211, 213
Mycelia sterilia
macroscopic mycelium 8:48; 41:1044, 1045, 1046
vascular necrosis, potato 33:1087
Mycobacterium rubiacearum
morphology 13:807
Mycogyne perniciosa
infection, effect temperature on, mushrooms 20:78
macroscopic mycelium 20:78
Mycosphaerella angulata
asci and ascospores 32:75
ascospore germination 32:75
conidial germination 32:75
conidial morphology 32:75
conidiophores and conidia 32:75
leaf spot, grape 32:75
spermogonia 32:75
arachidicola (See also: Cercospora arachidicola)
leaf spot, peanut 31:949
areola
areolate mildew 22:231
ascospore germination 22:235

Mycosphaerella areola (cont'd.)
ascospore morphology 22:235
perithecia 22:235
spermogonia 22:233
aurea (See: Septoria aurea)
ascospore germination 6:423
ascospore morphology 6:423
berkeleyi (See: Cercospora personata)
brassicola
asci and ascospores 5:263, 264
ascospore germination 36:483
ascospore morphology 36:483
leaf spot, cabbage 36:483
perithecia 5:263
pycnidia 5:264
ring spot, cauliflower 5:262
spermatia 36:482
cerasella
conidia 20:330
pathogen in host 20:330
penetration, external cells 20:330
perithecia 20:334
spermogonia 20:324
convexula
asci and ascospores 1:135, 136, 137
perithecia 1:136, 137
cruenta (See: Cercospora cruenta)
davisii (See: Cercospora davisii)
fragariae
conidial germination 28:318
conidial germination, as affected by fungicides 28:318
conidial morphology 28:318
conidiophores and conidia 3:242
entrance through stomata 24:621
leaf spot, strawberry 12:376; 24:625
perithecia 31:223
sporodochia 3:242
grossulariae
ascospore germination 6:421
ascospore morphology 6:421
perithecia 6:421
ligulicola (See also: Mycosphaerella ligulicola)
asci and ascospores 39:793
ascospore germination 39:793
ascospore morphology 6:421
cirrhi 39:793
conidial germination 39:793
conidial morphology 39:793
penetration, external cells, chrysanthemum 39:793
perithecia 39:791, 793
pycnidia 39:791, 793
linorum (See: Phlyctaena linicola)
louisianae
ascospore germination 31:229
ascospore morphology 31:229

Mycosphaerella louisianae (cont'd.)
entrance through stomata 31:235
leaf spot, strawberry 31:227
pathogen in host 31:229, 235
perithecia 31:228
ontariensis
asci and ascospores 5:8
chlamydospore germination 5:8
chlamydospore morphology 5:8
conidia 5:8
perithecia 5:8
persica (See: Cercosporella persica)
physostegiae
asci and ascospores 35:327
ascospore germination 35:327
ascospore morphology 35:327
leaf spot, Physostegia sp. 35:325
sporodochia 35:327
pinodes
conidia 17:397
pisi
leaf spot, pea 17:397
populicola
ascospore germination 31:246
ascospore morphology 31:246
growth in culture 31:245
leaf spot, Populus sp. 31:243
perithecia 31:245
pycnidia 31:245
spermogonia 31:245
populorum (See also: Septoria musiva)
asci and ascospores 31:246
ascospore germination 31:246
ascospore morphology 31:246
canker, Populus sp. 31:243
leaf spot, Populus spp. 31:243
perithecia 31:245
pycnidia 31:245
spermogonia 31:245
pueraricola
ascospore morphology 38:354
conidial formation 38:354
conidial morphology 38:354
leaf spot, kudzu 38:349, 351
ribis (See: Septoria ribis)
solani
asci and ascospores 3:242
perithecia 3:242
tulasnei
asci and ascospores 21:1148
conidia 21:1148
Myriogenospora aciculispora
dwarfing, sugarcane 31:564
paspali
dwarfing, Andropogon sp. 24:678
fasciculation, Andropogon sp. 24:678, 679

Myriosanospora paspali (cont'd.)
perithecia 24:679

Naucoria cerealis
mushrooms 28:853
Nectria cinnabarina
canker, mimosa 34:986
sporodochia 19:1126
discophora
asci and ascospores 3:242
conidia 3:242
conidiophores and conidia 3:242
perithecia 3:242
galligena
asci and ascospores 3:242
canker, pear 11:466, 468
conidia 3:49, 242
conidiophores and conidia 3:242
perithecia 3:242
ipomoeae
conidia 4:286
sanguinea
conidia 16:636
sp.
callus, maple 29:355
canker, maple 29:355
perithecia 29:355
Nematoctonis leiosporus
appressoria 31:776
clamp connections 31:776
conidia 31:776
tylosporus
clamp connection 31:775
conidia 31:774
Nematospora coryli
fruit rot, tomato 23:386
seed spot, pecan 23:1000
vascular necrosis, orange 19:480
phaseoli
ascospore germination 12:526
conidia 12:526
fruit spot, lima bean 12:530, 531
growth in culture 12:528
Neocosmospora vasinfecta
conidia 3:49
Neofabraea perennans (See: Gloeosporium perennans)
Neopeckia coulteri
asci and ascospores 3:158
mycelial mat 3:158
perithecia 3:158
Neottiospora yuccaeafolia
conidia 5:58
Nigrospora sp.
disease resistance, corn 35:561

Oïdium tingitanium
appressoria 5:194
conidia 5:194
conidiophores and conidia 5:194
curl, citrus 5:196
powdery mildew, citrus 5:196
Olpidium brassicae
blight, tobacco 37:425
sp.
sporangia 13:451, 452
Oospora citri-aurantii
conidiophores and conidia 7:40
fruit rot, lemon 7:38
lactis
growth in culture 4:320
scabies
scab, potato 3:18
Oosporoidea lactis
growth in culture 4:320
Ophioblous cariceti
distribution map 12:67
pathogen in host 12:88
perithecia 12:88
plant necrosis, wheat 12:68, 88
fuligus
asci and ascospores 24:968
conidia 24:968
perithecia 24:968
pycnidia 24:968
graminis
plant necrosis, wheat 20:907, 909
sp.
asci and ascospores 24:969
ascospore germination 24:969
ascospore morphology 24:969
conidiophores and conidia 24:971
perithecia 24:987
pycnidia 24:971
Ophiostoma narcissi
ascospores 40:494, 495
conidiophores and conidia 40:494, 495
perithecia 40:494, 495
Ormathodium fici
conidial germination 38:712
conidial morphology 38:712
conidiophores and conidia 38:713
growth in culture 38:712
Otthia amica
asci and ascospores 5:58
ascospore germination 5:58
perithecia 5:58
Ovulinia azaleae
apothecia 30:238
asci and ascospores 30:240

Ovulinia azaleae (cont'd.)
conidial germination 30:239
conidial morphology 30:240
conidiophores and conidia 30:239
penetration, external cells, azalea 30:239, 240
sclerotia 30:238
spermadochium 30:240
spermatia 30:240
Oxonium texanum
distribution map 27:154
macroscopic mycelium 24:530
rhizomorphs 24:528, 531, 532
sclerotia 24:529, 531, 532

- P -

Panagrolaimus subelongatus
captured by fungus 36:214
Paraphelenchus maupasi
bulb rot, hyacinth 24:164
Patellina fragariae
conidiophores and conidia 6:266
sporodochia 6:266
[illegible] (See also: Corticium sasakii; Rhizoctonia solani)
hymenium 35:742
leaf spot, Hevea sp. 35:740
leaf spot, Hibiscus spp. 38:504
leaf spot, Lonchocarpus sp. 40:38
leaf spot, sugar-beet 35:742
macroscopic mycelium 35:742
koleroga (See: Corticium koleroga)
rolfsii (See also: Sclerotium rolfsii)
hymenium 37:68
Penicillium expansum
control, fungicides 30:641
control, ultraviolet light 36:105
fruit rot, apple 26:787
growth in culture 22:889
notatum
growth in culture 41:994
growth in culture, effect chemicals on 41:994
oxalicum
conidia 9:37
conidiophores and conidia 9:37
tuber rot, potato 9:44
sp.
damping-off, soybean 35:145
fruit rot, apple 18:571
growth on soil 21:855
[illegible] influenced by association of [illegible]
pathogen in host 20:252
proof of pathogenicity 35:145
Peridermium balsameum
aecia 6:370
aeciospores 6:370

Peridermium cerebroides
aeciospore germination 19:341
aeciospore morphology 19:341
stunting, Pinus sp. 19:338
tumefaction, Pinus sp. 19:331
comptoniae
aeciospores 4:26
sorus 4:25
fructigenum
distribution map 1:94
harknessii
aecia 6:227, 228
fasciculation, Pinus sp. 6:227
tumefaction, Pinus sp. 6:227, 228
peckii
distribution map 1:95
pyriforme
aeciospores 4:26
sorus 4:26
sp.
aecia 28:41, 49
cytological study of 27:49
disease resistance, Pinus sp. 25:825
haustoria 25:828; 28:30, 41
pathogen in host 25:828; 27:47, 48, 49
pathological histology 25:828; 28:29, 37, 47, 48, 49
penetration, external cells, Pinus sp. 25:828; 28:30
sorus 28:27
spermogonia 28:49
tumefaction, Pinus sp. 25:825; 27:27
Peronospora destructor
sporangial germination 28:265
sporangial morphology 28:265
effusa
pathogen in host 24:1022, 1023
manchuria
disease resistance, soybean 36:1058
nicotianae (See also: P. tabacina)
sporangial germination 24:343
sporangial morphology 24:343
conidiophores and conidia 24:341, 343; 25:517
entrance through stomata 24:343
haustoria 24:343
oogonia and antheridia 24:343
oospore morphology 24:343; 25:519
parasitica
conidiophores and conidia 16:365; 25:956
control, benzene 37:902, 904
downy mildew 2:203
head rot, cabbage 25:957
pathogen in host 10:322
pathological histology 25:956
plant necrosis, cabbage 37:902, 904
parasitica brassicae, race 2
disease resistance, histological demonstration of 39:542
entrance through stomata 39:542

. parasitica parasitica brassicae, race 2 (cont'd.)
penetration, external cells, cruciferae 39:542
penetration, internal cells, cruciferae 39:542
[illegible]
disease resistance, spinach 40:67
downy mildew, spinach 40:67
tabacina (See: P. nicotianae)
blight, tobacco 26:771, 775
chlorosis, tobacco 29:80
control, benzol 29:100, 186
control, dusts 37:132, 133
control, paradichlorobenzene 29:218
control, sprays 37:129
control, seed beds 27:984, 986, 988
[illegible] 21:794
dissemination map 24:345, 353
distribution map 25:629, 631
downy mildew, tobacco 24:340, 341
leaf spot, Nicotiana repanda 37:725
leaf spot, tobacco 29:79, 80, 81, 82; 31:287
losses 25:655
[illegible] germination 26:765
[illegible] morphology 30:[illegible]
[illegible] and [illegible]
savoyna, tobacco 23:50
shot-hole, tobacco 29:82
29:81;32:507,508
vicise
macroscopic mycelium 24:1359
proliferation, pea 24:1359
Pestalotia aquatica
conidia 19:225
casati
conidia 19:208
clavata
conidia 19:218
copernica
conidia 19:218
curta
conidia 19:209
disseminata
leaf spot, Terminalia sp. 33:405
shot-hole, Terminalia sp. 33:405
foedans
conidia 19:208
funerea
acervulus 4:383
conidia 19:208
gibbosa
conidia 19:218
glandicola
conidia 19:207
gracilis
conidia 19:218
guepini
acervuli 19:232
conidia 19:232
inquinans
conidia 19:225

Pestalotia leprogena
conidia 19:221
macrotricha
canker, Rhododendron sp. 20:87
conidia 19:207
leaf spot, Rhododendron sp. 20:87
pycnidia 20:89
[illegible]
conidia 19:221
malleriana
conidia 19:225
pallidicolor
conidia 19:218
palmarum
conidia 19:209
pezizoides
acervuli 19:232
conidia 19:233
stem lesions, Vitis sp. 19:199
podocarpi
acervuli 24:1027
conidia 24:1027
leaf spot, Podocarpus sp. 24:1027
rhododendri
conidia 19:221
seirpina
conidia 19:207
seirrofaciens
acervuli 10:385
sphaerelloides
conidia 19:207
stellata
conidia 19:221
theae
conidia 19:208
torulosa
conidia 19:218
vaccinii
conidia 19:209
vermiformis
conidia 19:225
versicolor
conidia 19:225
sp.
leaf spot, Camellia sp. 19:199
Pestallozia sp.
tumefaction, sapodilla 10:384, 386, 387, 388
Pestalozzia funerea
blight, Picea sp. 4:384
chlamydospore germination 4:379
chlamydospore morphology 4:379
cirrhi 4:383, 384
conidial germination 4:377, 378
conidial morphology 4:377
growth in culture 4:38[illegible]

Pestalozzia sp.
conidia 4:68
Peziziella lythri
leaf spot, peony 30:410
oenotherae (See: Hainesia lythri)
[illegible] (See: Cytosporina ampelina and C. Malorum)
Phlyctaena limicola
growth in culture 20:932, 936, 938
Pholiota adiposa
growth in culture 31:829
dura
mushrooms 28:78
praecox
mushrooms 28:78
Phoma apicola
growth in culture 34:93
batatae
pycnidia 2:121
betae
crown rot, beet 20:627, 629
growth in culture 26:559; 39:851
infection, influenced by pre-treatment of host 40:[illegible]
root rot, beet 18:939, 940; 21:294; 26:557, 559; 38:344
insidiosa
conidia 11:265
leaf spot, sorghum 11:268
pycnidia 11:261, 268
lingam
black leg, cabbage 1:28; 8:382, 384, 418; 41:825
canker, cabbage 8:407
cotyledon rot, cabbage 8:414; 41:821
fruit spot, cabbage 8:408
genetics of 39:851, 855
growth in culture 8:413; 39:850, 851
proof of pathogenicity 8:396
pycnidia 1:28; 8:407, 408, 409, 413, 414; 39:851, 855; 41:821
seed spot, cabbage 8:412
medicaginis
growth in culture 26:1017
leaf spot, alfalfa 26:1016
pycnidia 26:1017
stem lesions, alfalfa 26:1017
piceana
conidia 4:68
pomi
conidia 2:72
growth in culture 2:72
fruit spot, apple 2:72
pathological histology 2:72
pycnidia 2:72
terrestris (See also: Pyrenochaeta terrestris)
bulb rot, onion 31:909, 912
growth in culture 19:700, 701, 702
pathogen in host 31:908, 909; 33:527
pathological histology 33:527
penetration, internal cells, onion 31:909

Phoma terrestris (cont'd.)
proof of pathogenicity 27:768, 769
pycnidia 19:701; 31:906
root rot, onion 19:697
Phoma sp.
conidia 4:66
damping-off, beet 17:268, 269, 270, 271, 275, 279, 284
pycnidia 4:66
(?) sp.
conidia 21:256
fruit spot, banana 12:102
Phomopsis abietina
canker, Abies sp. 19:988
[illegible]
growth in culture 12:423
caribaea
conidia 12:416
citri
abscission, fruit, citrus 2:112
conidial germination 2:112
conidial morphology 2:112
growth in culture 2:112; 12:423
pycnidia 2:112
crotalariae
conidia 23:603
pycnidia 23:599, 603
gardeniae
canker, gardenia 28:597
juniperovora
blight, Pseudotsuga sp. 16:910, 914
canker, Juniperus sp. 16:914
cirrhi 16:914
pycnidia 16:914
mali (See: Fusicoccum pyrorum)
pseudotsugae
canker, Pseudotsuga sp. 19:980, 986
dieback, Pseudotsuga sp. 19:980
pycnidia 19:980, 981
vaccinii (See also: Diaporthe vaccinii)
blight, Vaccinium sp. 29:140
[illegible]
canker, Castanea sp. 27:1147
canker, peach 30:964
conidia 33:405
leaf spot, Terminalia sp. 33:405
pycnidia 10:250; 21:78; 25:888; 27:1147; 30:964
shot-hole, Terminalia sp. 33:405
tumefaction, blackjack oak 28:405
tumefaction, black oak 28:402, 405
tumefaction, blueberry 28:72
tumefaction, chestnut oak 28:404, 405
tumefaction, elm 31:542, 543
tumefaction, hickory 28:404
tumefaction, Jasmine 31:542
tumefaction, Jasmium spp. 26:798; 28:407

Phomopsis sp. (cont'd.)
tumefaction, Ligustrum sp. 26:796
tumefaction, maple 31:545, 546
tumefaction, privet 28:407; 31:542
tumefaction, red oak 28:404, 405
tumefaction, Viburnum sp. 24:1120; 28:72, 407
Phragmidium rubi-idaei
leaf spot, raspberry 36:334
Phycomyces blakesleeanus
growth in cult. 29:594, 595
Phyllachora graminis
stromata 7:55
Phyllosticta antirrhini
cirrhi 9:321
conidial germination 9:322; 10:244
morphology 9:320, 321, 322
damping-off, snapdragon 9:316, 317
entrance through stomata, snapdragon 10:241
growth in cult. 10:245
leaf spot, snapdragon 9:315
microscopic mycelium 9.318
pycnidia 9:316, 319, 320, 321; 10:243, 247
wilt, snapdragon 10:236
solitaria
appressoria 22:356
canker, apple 14:236, 568; 20:844, 845
conidial germination 22:351
morphology 22:351
fruit spot, apple 14:236
growth in cult. 23:507
pathogen in host 22:356
pathological histology 14:564, 565, 566, 568
pycnidia 14:236, 559, 562, 568; 20:844, 845; 22:351
straminella
stem lesions, rhubarb 24:833
vaccinii
conidia 37:494
fruit spot, blueberry 37:494
leaf spot, blueberry 37:494
pycnidia 37:494
Phyllosticta sp.
blight, lilac 19:1123
leaf spot, snapdragon 10:233
pathogen in host 16:558
stem lesions, snapdragon 10:235
Phymatotrichum omnivorum
aerial photographs 19:1027; 24:553
antagonism to other fungi, histological demonstration 25:565, 567
control, sulfur 33:1207
canker, cotton 31:360
cytological study of 25:567, 569; 29:499, 501
disease resistance, Malvaviscus sp. 22:456
distribution map 29:486, 488; 35:300
growth in cult. 16:730; 22:912; 25:565; 38:144

Phymatotrichum omnivorum (cont'd.)
infection, influenced by pH, cotton 20:806
macroscopic mycelium 23:677
mycelial mat 27:150
pathogen in host 25:565, 567, 569; 28:198
penetration, internal cells, watermelon [illegible]
proof of pathogenicity 31:359
root rot, alfalfa 29:489
root rot, cotton 19:168; 22:447; 29:489
root rot, okra 22:447
sclerotia 20:779; 21:552, 553; 29:499, 501
wilt, watermelon 25:563
Physalospora corticis
asci and ascospores 32:1070, 1071
ascospore germination 32:1071
morphology 32:1071
callus, blueberry 32:1069
canker, blueberry 32:1069, 1070
conidia 32:1071
cracking, blueberry 32:1069
infection, effect temperature on blueberry 32:1070
perithecia 32:1070
cydoniae
asci and ascospores 3:295
growth in cult. 3:295
perithecia 3:294
proof of pathogenicity 3:294
malorum
canker, apple 17:737
miyabeana
canker, willow 31:1057
perithecia 31:1057
obtusa
asci and ascospores 41:461
cytological study of 41:461
entrance through stomata 27:818
growth in cult. 27:806
leaf spot, apple 27:814
rhodina (See also Diplodia natalensis, D. theobromae)
conidia 20:737
tucumanensis
asci and ascospores 34:209
perithecia 34:207, 208
pathological histology 34:207
stem rot, sugarcane 34:210, 211; 41:525
zeae
asci and ascospores 36:208
ear rot, corn 36:202
growth in cult. 36:205, 208
growth in cult., influenced by nutrition 36:205
leaf spot, corn 36:202
pycnidia 36:208
sclerotia 36:202

Physalospora zeicola
asci and ascospores 23:66
conidia 23:66
ear rot, corn 23:65
perithecia 23:65
Physalospora sp.
perithecia 15:340
Physoderma graminis
pathogen in host 41:1067
pathological histology 41:1067
penetration, internal cells, Agropyron sp. 41:1067
sporangia germination 41:1067
morphology 41:1067
Physoderma sp.
pathogen in host 37:887
pathological histology 37:887
sporangia 37:887
stem rot, Agropyron sp. 37:886
stripe, Agropyron sp. 37:886
stunting, Agropyron sp. 37:886
Phytobacter lycopersicum
pathogen in host 4:374
Phytomonas aceris
canker, Acer sp. 29:968
leaf spor, Acer sp. 29:968
aptata
blight, sugar-beet 36:550
vascular necrosis, sugar-beet 36:550
asplenii
blight, Asplenium sp. 36:759, 893
begoniae
leaf spot, begonia 29:634
beticola
canker beet 21:15
tumefaction 21:15, 19
bowlesii
leaf spot, Bowlesia sp. 17:508
carotae
canker, carrot 34:418
pathological histology 34:417, 418
scab, carrot 34:417, 418
cattleyae
leaf spot, orchid 36:696
coryline
leaf spot, walnut 30:727
growth in cult. 30:714
morphology 30:714
stem lesions, filbert 30:729
stem lesions, walnut 30:726, 727
dissolvens
entrance through stomata, corn 16:267
growth in cult. 16:267
stem rot, corn 16:244, 250, 267

Phytomonas flaccumfaciens (See also: Bacterium flaccumfaciens)
stunting, corn 28:478
gardeniae
leaf spot, gardenia 31:192
geranii
leaf spot, geranium 27:554
insidiosa
pathogen in host 28:479
juglandis
blight, walnut 34:331, 332
fruit spot, walnut 30:727
leaf spot, walnut 34:333
stem lesions, filbert 30:729
stem lesions, walnut 30:726, 727
maculifolium-gardeniae
flower spot, gardenia 36:866
leaf spot, gardenia 36:866
malvacearum
disease measurement 34:236
dissemination of 32:82
ooze 32:86
stem lesions, cotton 32:85, 86
medicaginis var. phaseolicola (See also: Pseudomonas syringae var. phaseolicola; Pseudomonas phaseolicola)
blight, bean 30:262
chlorosis, bean 16:917, 918
disease resistance, bean 32:248, 250, 251
fruit spot, bean 16:927; 34:474
growth in cult. 16:927
infection, influence of source of isolate, bean 34:474
infection, influence temperature on, bean 30:262
morphology 16:927
leaf spot, bean 32:248; 34:474
leaf veinal necrosis, bean 16:925
yellowing, bean 32:248; 34:474
wilt, bean 34:474
melophthora
fruit rot, apple 22:562; 24:231
polycolor
growth in cult. 20:699
leaf spot, tobacco 20:693, 696
morphology 20:699
primulae
leaf spot, Primula sp. 26:1054
yellowing, Primula sp. 26:1054
pruni
canker, peach 23:788, 791, 796
pathogen in host 23:789, 799
pathological histology 23:799
savastanoi
tumefaction, Forestiera sp. 31:362
tumefaction, Olea spp. 31:362
tumefaction, Osmanthus sp. 31:362
sepedonica
growth in cult. 33:406

dissemination of 34:447
stewartii (See also: Bacterium stewartii)
change in virulence by host 27:1075, 1079, 1084
disease resistance, corn 27:1075, 1079, 1165
growth in cult. 27:1086; 28:389, 391, 774, 776
[illegible]
infection, influenced by source of isolate 29:1059
leaf spot, corn 25:994
leaf spot, Setaria spp. 25:994
leaf spot, sorghum 25:994
leaf spot, sudan grass 25:994
stem rot, corn 25:999
streak, corn 30:247
stunting, oats 28:478
syringae
fruit spot, citrus 33:83; 35:943
leaf spot, Hibiscus sp. 33:83
[illegible]
disease resistance, plus resistance to watersoaking, tobacco [illegible]
tardicrescens (See also: Bacterium tardicrescens)
leaf spot, iris 27:614
tumefaciens (See also: [illegible] Pseudomonas tumefaciens)
[illegible]
pathogen in host 37:622
[illegible]
tumefaction, Abies spp. 32:1009
tumefaction, beet 21:19
tumefaction, Cunninghamia sp. 32:1008
tumefaction, hop 24:690
tumefaction, Podocarpus sp. 32:1008
tumefaction, Sequoia spp. 25:440; 32:1008
tumefaction, Taxus spp. 32:1006
tumefaction, tomato 21:19
tumefaction, Torreya sp. 32:1006
wilt, filtrate from culture of, 37:304
vasculorum (See also: Bacillus vasculorum)
leaf spot, corn 25:995
leaf spot, sorghum 25:995
leaf spot, sugarcane 25:995
stem rot, corn 25:999
stem rot, sorghum 25:999
viburni
leaf spot, Viburnum sp. 21:907, 911
washingtoniae
leaf spot, Washingtonia sp. 33:1202
pathogen in host 33:1202
woodsii
infection, effect temperature on, carnation 25:116
leaf spot, carnation 25:116

growth in cult. 25:220, 224
mycelial mat 22:218
sheath rot, Areca sp. 22:218
cactorum
canker, Cedrus sp. 27:1108
canker, Eucalyptus sp. 27:1108
canker, loquat 32:406, 407
canker, peach 25:801, 804
canker, Persea sp. 27:1108
collar rot, snapdragon 24:416
growth in cult. 7:125
haustoria 29:603
pathogen in host 29:653
pathological histology 24:416; 39:655
sporangia 24:416
wilt, sesame 38:754
wilt, snapdragon 24:416
capsici
antheridia and oogonia 30:953
blight, pepper 40:747
fruit rot, cucumber 31:974
[illegible] tomato 30:974; 36:330
fruit distortion, tomato 34:816
growth in cult. 30:953, 955
infection, influenced by position of host, tomato 36:331
leaf spot, pepper 22:776
oospores 30:953
pathogen in host 34:814
pathological histol[illegible]
[illegible] of pathogenicity 30:974
penetration, external cells, tomato 34:814
sporangial germination 34:814
sporangial morphology 12:405, 17:484; 30:953; 34:814
wilt, pepper 40:747
wilt, squash 30:974
zoospores 34:814
cinnamomi
canker, cinchona 41:643
chlamyospores 26:38
dieback, chestnut 35:164
distribution map 35:166; 41:744
fruit rot, pineapple 25:30
heart rot, pineapple 24:174
microscopic mycelium 35:169
proof of pathogenicity 41:643
sporangial germination 35:169
sporangial morphology 31:38; 35:169
vascular necrosis, cinchona 41:643
wilt, avocado 38:135

Phytophthora citropathora
antagonism to other fungi 25:764
antheridia and oogonia 25:764
canker, Castanea sp. 27:1108
canker, Cedrus sp. 27:1108
canker, Eucalyptus sp. 27:1108
canker, Persea sp. 27:1108
growth in cult. 25:764, 766
erythroseptica
blight, Zantedeschia sp. 37:383, 384
chlorosis, Zantedeschia sp. 37:383
growth in cult. 7:125
pathological histology 40:713
[illegible]
[illegible]
infestans
blight, potato 11:456; 37:628
blight, tomato 9:210
canker, tomato 6:286; 36:390
control, fungicides 11:189; 37:628
disease resistance, potato [illegible]
distribution map 24:77
fruit rot, tomato 4:374
growth in cult. 16:124, 127; 37:639
infection, effect temperature on, tomato [illegible]
macroscopic mycelium 6:285
oospores 16:129
recovery of plant from disease, potato 30:746
tuber rot, potato 33:1105
inflata
antheridia and oogonia 39:487
canker, elm 39:482, 483
sporangia 39:487
zoospores 39:487
meadii
growth in cult. 20:954
heart rot, pineapple 20:951
sporangial germination 20:955
morphology 20:955
[illegible]
growth in cult. 20:954
sporangial germination 20:955
morphology 20:955
mexicana
sporangial germination 13:530
morphology 13:530; 17:488
nicotianae
wilt, extracts from culture of 23:607
omnivora
macroscopic mycelium 16:724
sporangia 16:728; 17:485, 486, 487

Phytophthora paeoniae
antheridia and oogonia 18:885, 899
blight, peony 18:882, 896
pathogen in host 18:885, 899
sporangia and sporangiophores 18:899
palmivora
antheridia and oogonia 21:947, 948
blight, avocado 38:1033
chlamydospores 22:224
growth in cult. 21:944; 22:220, 224
leaf spot, Aleurites sp. 22:222
oospore germination 21:949
morphology 21:949
pathological histology 37:870
plant necrosis, Dieffenbachia sp. 37:871
proof of pathogenicity 37:871
sporangia and sporangiophores 21:946, 947
stem rot, Dieffenbachia sp. 37:868, 869
parasitica
antagonism to other fungi 25:764
antheridia and oogonia 21:946, 947
canker, cinchona 41:644
control, by banking soil around base of host 32:531, 532
crown rot, corn 38:1030
dieback, papaya 32:315
fruit rot, tomato 38:1030
growth in cult. 21:944, 945; 25:764
mummification, papaya 32:317
pathological histology 35:164
sporangia and sporangiophores 21:946, 947
proof of pathogenicity 41:644
phaseoli
sporangia 17:484
richardiae
control, by hot water 34:980
syringae
blight, lilac 14:504
sporangia 14:506
terrestria
antheridia and oogonia 7:125, 128
chlamydospores 7:128
fruit rot, tomato 7:119, 120
growth in cult. 7:125
macroscopic mycelium 7:120
proof of pathogenicity 7:120
sporangia germination 7:128
morphology 7:128
zoospores 7:128
Phytophthora sp.
blight, pineapple 24:175
growth in cult. 20:205, 206, 207, 208
oospores 20:208, 210
sporangia 11:146
stem rot, asparagus 28:755

Piricularia oryzae
conidial formation 38:268
growth in cult. 38:266
Plasmodiophora brassicae
control, by mercuric chloride 34:188, 189
Plasmopara viticola
entrance through stomata 2:248, 249
oospore morphology 2:236
germination 2:237
sporangial germination 2:237, 241
morphology 2:237, 241
zoospore germination 2:243
morphology 2:241, 243, 248, 249
Plectodiscella pyri
perithecia 19:677
veneta
anthracnose, Rubus sp. 19:602
anthracnose, raspberry 7:84
asci and ascospores 7:88
ascomata 7:88
ascospore germination 7:88
perithecia 19:675
Plectospira myriandra
[illegible] other organisms 38:275, 295, 304, 361017, 337, 344
Plectus parvus
captured by fungus 31:776, 788
Plenodomus destruens
conidia 3:245
pycnidia 3:244
Pleospora lycopersici
growth in cult. 29:544
leaf spot, tomato 29:543
mali
conidia 18:573
growth in cult. 18:568
Pleospora sp.
fruit rot, apple 18:571
perithecia 18:572, 575
Pleurotus ostreatus
growth in cult. 31:829
mushrooms 11:392, 393
pathological histology 11:400
ulmarius
growth in cult. 31:829
Podosphaera oxyacanthae
powdery mildew, cherry 37:422
Podosporiella verticillata
conidia 5:326
conidiophores and conidia 5:326
growth in cult. 5:326
synnema 5:326

Polyporus variabilis
growth in cult. 40:928, 929
growth in cult., effect nutrition on 40:936, 938
balsameus
butt rot, Abies sp. 19:726
chlamydospores 33:982
growth in cult. 33:980
mushrooms 19:729
penetration, external cells, Abies sp. 19:727
berkeleyi
mushrooms 33:974
pathological histology 2:104
circinatus
chlamydospores 30:956
pathogen in host 30:961
setae 30:958
stem rot, conifers 30:959, 960
pergamenus
pathogen in host 26:64
pathological histology 26:64
schweinitzii
growth in cult. 27:31, 33, 37; 33:980
infection, influenced by host nutrition, Pinus sp. 27:1130, 1133
intumescence, Pinus sp. 27:1130, 1133
mushrooms 7:427
pathogen in host 27:1133, 1136; 38:374
pathological histology 38:374
proof of pathogenicity 27:1130
root rot, lupine 38:374
spraguei
mushrooms 33:974
pathological histology 33:974
subcartilagineus
chlamydospores 33:982
clamp connections 33:982
growth in cult. 33:980
mushrooms 33:971
tulipiferus
mushrooms 35:221
Polystictus versicolor
mushrooms 2:118; 10:471; 30:937
Polyporus versicolor
growth in cult. 40:932
growth in cult., effect nutrition on 40:932
mushrooms 35:574
volvatus
mushrooms 12:495
Poria cocos
chlamydospores 35:96
macroscopic mycelium 35:96
sclerotia 35:96
inflata
pathological histology 33:971
microspora
mushrooms 35:128

Poria mutans
chlamydospores 33:982
growth in cult. 33:980
pathological histology 33:971
obliqua
mushrooms 37:189
pathological histology 37:189
prunicola
growth in cult. 33:980
sericeo-mollis
[illegible]
clamp connections 33:982
growth in cult. 33:980
subacida
growth in cult. 40:928, 929
growth in cult., effect nutrition on 40:928, 929
xantha
chlamydospores 33:982
clamp connections 33:982
growth in cult. 33:980
growth in cult., effect chemicals on 39:33, 34
xantha f. crassa
growth in cult. 33:521
growth in cult., effect chemicals on 33:521
Pratylenchus musicola
cracking, olive 28:757
pratensis
losses 38:529
pathogen in host 40:1112
root lesions, tobacco 38:532, 533
stunting, tobacco 38:529
wilt, tobacco 38:529, 530, 531
pratensis plus Rhizoctonia basicola
root lesions, tobacco 38:533
Pratylenchus sp.
fruit spot, peanut 35:937
root lesions, corn 35:936
root lesions, Solidago sp. 35:936
Psalliota bispora
growth in cult. 40:796
mushrooms 40:795
Pseudobalsamia microspora
ascocarp 34:377
macroscopic mycelium 34:377
Pseudobalsamia sp.
perithecia 20:917
Pseudodiscosia avenae
conidia 33:166
leaf spot, oat 33:165
Pseudofumago sp.
conidia 18:846
macroscopic mycelium 19:1123

Pseudomonas aceris (See: Phytomonas aceris)
aptata (See: Phytomonas aptata)
aucubicola
growth in cult. 26:258
morphology 26:258
bowlesii (See: Phytomonas bowlesii)
[illegible] (See also: [illegible])
black rot, cabbage 9:276
entrance through stomata, cabbage 9:277
pathogen in host 9:277, 278, 279, 280
pathological histology 9:277, 278, 279,280
cerasi
growth in cult. 24:549
cerasi (?)
canker, pear 24:535
citriputeale (See: Bacterium citriputeale)
coronafaciens var. atropurpurea (See: Bacterium coronafaciens var. atropurpureum)
erodii (See: Bacterium erodii)
fluorescens
pathogen in host 26:1132
gardeniae (See: Phytomonas gardeniae)
glycinea (See also: Bacterium sojae)
lachrymans (See also: Bacterium lachrymans)
fruit rot, cucumber 41:1061
fruit spot, cucumber 41:1061
fruit spot, melon 36:944
leaf spot, melon 36:944
pathogen in host 36:944; 41:1062
pathological histology 36:944; 41:1063
proof of pathogenicity 36:944
seed spot, cucumber 41:1063
marginalis
stem rot, witloof celery 41:881
marginata (See: Bacterium marginatum)
[illegible] (See also: [illegible] phaseolicola; Pseudomonas phas
dis. measurement 40:606
dis. resistance, bean 40:606
leaf spot, bean 40:606
melophthora (See: Phytomonas melophthora)
papulans (?)
canker, apple 7:203, 204
fruit spot, apple 7:199
phaseolicola (See also: Phytomonas medicaginis var. phaseolicola; Pseudomonas medicaginis var. phaseolicola)
leaf spot, bean 37:197
leaf spot, kudzu 38:349
[illegible]
entrance through stomata, pea 17:625
fruit spot, pea 16:183; 17:627
leaf spot, pea 16:183
ooze 17:627
pathogen in host 17:612, 613, 618, 619, 620, 622, 623, 625
seed spot, pea 17:627

Pseudomonas polycolor (See: Phytomonas polycolor)
primulae (See: Phytomonas primulae)
prunicola
canker, plum 21:1159
radicicola
morphology 18:807
pathogen in host, soybean 18:805
ribicola
proof of pathogenicity 35:1012
savastano (See also: Bacterium savastanoi; Phytomonas savastanoi)
tumefaction, Adelia sp. 12:278
tumefaction, Chionanthus sp. 12:278
tumefaction, Fraxinus sp. 12:278
tumefaction, Jasmium sp. 12:278
tumefaction, Ligustrum sp. 12:278
tumefaction, Osmanthus sp. 12:278
savastanoi var. nerii
pathogen in host 18:518
tumefaction, Adelia sp. 18:518
tumefaction, Chionanthus sp. 18:518
tumefaction, oleander 18:518
solanacearum (See also: Bacterium solanacearum; Phytomonas solanacearum)
syringae (See: Bacterium citriputeale; Pseudomonas cerasi; Ps. citriputeale
Ps. prunicola; Phytomonas syringae)
tabaci (See also: Bacterium tabaci; Phytomonas tabaci)
leaf spot, soybean 35:858, 862
yellowing, soybean 25:858
tabaci plus "watersoaking"
leaf spot, soybean 35:865
tomato (See: Bacterium punctulans)
tonelliana (See: Pseudomonas savastanoi var. nerii)
tumefaciens (See also: Agrobacterium tumefaciens; Bacterium tumefaciens;
Phytomonas tumefaciens)
fasciation, sweetpea 17:30
pathogen in host 18:518, 564
pathological histology 31:139, 142, 145
tumefaction, blueberry 28:72
tumefaction, Cupressus sp. 27:846
tumefaction, Diospyros sp. 27:846
tumefaction, Libocedrus sp. 27:845, 846
tumefaction, Schinus sp. 27:846
tumefaction, tomato 27:846
viburni (See: Phytomonas viburni)
woodsii (See: Phytomonas woodsii)
Pseudoperonospora humuli
control, fungicides 27:940
dis. measurement 32:333
leaf spot, hop 27:940; 32:332
Pseudopeziza ribis
acervuli 26:117
anthracnose, currant 26:117
anthracnose, gooseberry 26:117
ascospores 26:120

Pseudopeziza ribis (cont'd.)
conidia 26:120
cytological study of 26:120
pathogen in host 26:120, 138
penetration, external cells, gooseberry 26:138
perithecia 26:120, 142
Pseudoplea medicaginis
ascospore germination 15:678, 679
[illegible] 15:679
growth in cult. 15:690
leaf spot, Medicago sp. 15:690
seed spot, Medicago sp. 15:690
Pseudosaccaromyces sp.
conidia 18:846
Puccinia albiperidia
aecia (internal) 11:343
spermogonia 11:343
anomala
disease resistance, barley 20:876, 877, 878
uredia 20:876, 877, 878
antirrhini
disease resistance, snapdragon 25:981; 27:114
infection, influenced by air temperature, snapdragon 41:540
infection, influenced by presence of secondary organisms, snapdragon 41:545, 547
infection, influenced by temperature, snapdragon 25:981
uredia 27:114; 41:540, 545
asparagi
aecia 11:88, 89
Butlerianum
aeciospores 9:570
coronata
entrance through stomata, oat 34:31
infection, influenced by moisture content of air, oat 37:412
disease resistance, Festuca sp. 37:61
disease resistance, oat 9:314; 26:227; 37:412, 791
haustoria 34:34, 35, 36, 37
leaf spot, oat 39:301
pathological histology 34:31, 33, 34, 35, 36, 37
proof of pathogenicity 37:412
uredia 9:314; 37:412
wilt, extract from culture of Helminthosporium victoriae plus effect of this pathogen, oat 39:305
coronata var. Agrostis
teliospores 39:147
coronata avenae
disease resistance, oat 28:900
infection, influenced by light 29:771
[illegible]
Fendleri
aecia 9:574
aeciospores 9:570

Puccinia glumarum
infection, influenced by light, barley 24:510, 511, 513
rust, barley 24:510, 511, 513
uredospore germination 21:770
morphology 21:770
teliospore germination 21:784
morphology 21:784
graminis
aecia 9:574
aeciospores 9:570
cytological study of 21:1017
disease resistance, histological demonstration of, wheat 36:628
ooze 21:1017
spermogonia 21:1017
graminis avenae
disease resistance, oat 35:549
infection, influenced by resistance of plant to cold, oat 29:773
uredia 32:1089
graminis avenae, race 5
disease resistance, oat 32:1089
graminis avenae, race 8
distribution map 34:423
graminis phlei pratensis
disease resistance, timothy 14:367
graminis tritici
aecia 18:1006, 1012, 1013; 21:1020, 1023, 1026, 1030; 35:419
appressoria 25:1049
browning around lesions, wheat 33:485
chlorosis, wheat 33:484
control, by fungicides 19:641; 38:177, 178, 179
disease measurement 18:20; 22:497
disease resistance, barley 9:88
disease resistance, Triticum spp. 33:887, 888, 894
disease resistance, wheat 9:88; 15:387; 16:827; 17:596; 18:123
[illegible]
entrance through stomata, wheat 25:1049
haustoria 33:487, 488, 490
hyphal fusions 37:746
isolates of physiologic races, 1940 33:892, 893
[illegible]
infection, influenced by light, wheat 25:721
infection, influenced by nutrition of host, wheat 39:388
losses 38:165
pathogen in host 33:437, 488
pathological histology 1:154; 25:1049, 1052; 33:487
population trends of physiologic races 33:885
radioautographs, wheat 36:561
rust, wheat 20:361; 36:561
seed spot, wheat 1:151
telia 33:336
[illegible]
516, 519; 25:721, 1047, 1051, 1056; 33:336, 484, 487, 887, 888, 894; 34:888, 889, 893, 896; 39:389
uredospore germination 24:81; 33:494; 37:746
morphology 24:81; 33:494; 37:746

Puccinia graminis tritici, race 15B
  rust, wheat 34:838, 862, 893, 896
graminis tritici, f. 21
  disease resistance, wheat 22:497, 500, 501, 511, 514, 516, 519, 520, 523, 524
graminis tritici, race 189
  uredia 32:721, 722
graminis tritici compacti
  disease resistance, wheat 8:145, 146; 9:88
  uredia 8:145, 146; 9:86
helianthi
  aecia 21:1018, 1022; 25:1087
  hyphal fusions 25:1088
  pathological histology 25:1088
  rust, sunflower 2:203
  spermogonia 21:1014
[illegible]
  basidiospores 1:62
  cytological study of 23:574, 576, 578, 579
  sorus 1:62
  teliospore germination 1:62
    morphology 1:62
obliqua
  rust, Prenanthes sp. 18:195
  uredia 18:198
pallidia
  aecia 9:574
  aeciospores 9:576
polyspora
  sorus 31:856
  teliospores 31:857
pruni-persicae
  basidiospores 2:144
  pathogen in host 2:144
  sorus 2:144
  teliospore germination 2:144
    morphology 2:144
  uredospore germination 2:144
    morphology 2:144
pruni-spinosae var. discolor
  teliospores 28:418
pruni-spinosae var. typica
  teliospores 28:418, 419
rubidi
  abscission, leaves, Pimenta sp. 28:162
  disease resistance, Eugenia sp. 28:158
  infection, effect of temperature on, Pimenta sp. 28:160
  leaf spot, Eugenia sp. 28:158
  leaf spot, Pimenta sp. 28:160
  uredia 28:158, 163
sorghi
  disease resistance, histological demonstration of, sorghum 21:537, 541
  pathogen in host 21:537, 541
  rust, sorghum 21:536, 537, 540
  uredia 21:536, 538, 541

Puccinia rubigo-vera
uredospores 25:676
teliospores 25:677, 678
sorghi
cytological study of 23:924
disease resistance, corn 17:817
[illegible]
entrance through stomata 12:92; 17:825
ooze 23:924
pathogen in host 13:825
rust, corn 2:203; 18:348
spermatia 23:9[illegible]
spermogonia 23:924
teliospores 31:857
uredia 12:94; 17:825
stakmanii
[illegible]
basidia and basidiospores 33:384
basidiospores 33:384
leaf spot, Bouteloua sp. 33:383
leaf spot, cotton 33:383, 384
spermogonia 33:383, 384
teliospore germination 33:384
morphology 33:384
uredospores 33:384
subnitens
[illegible]
telia 4:205
tompara
telia 25:678
triticina
disease resistance, barley 26:238
disease resistance, wheat 10:168, 169; 16:120
[illegible]
disease measurement 10:166
hyphal fusions 37:745, 748
uredospore germination 31:745, 748
morphology 31:745, 748
uredia 16:120; 20:612; 24:1046; 26:238
Pullularia pullulans (See also: Dematium pullulans)
fruit spot, tomato 35:211
Pyrenochaeta terrestris (See also: Phoma terrestris)
growth in cult. 39:851
pycnidia 38:834, 835, 837
Pyronema sp.
growth on soil 21:855
Pyrenophora bromi
growth in cult. 35:242
leaf spot, Bromus sp. 35:242
Pyrenophora sp.
growth in cult. 25:358
sclerotia 25:358
Pythiacystis citrophthora
growth in cult. 5:318; 7:125
proof of pathogenicity 5:320

ythium . . .
antheridia 15:398
canker, almond 15:391, 394
oogonia 15:398
oospores 15:397, 399
sporangia 15:399
ythium acanthicum
antheridia and oogonia 29:401
fruit rot, watermelon 29:396
oospore germination 29:399
morphology 29:399
parasitizing other organisms 33:288, 290; 36:816, 817, 837, 844
sporangia germination 29:398
morphology 29:398
morphology 29:399
aphanidermatum
fruit rot, watermelon 29:415
growth in cult. 29:417
oogonia 29:418
parasitized by other fungi 36:844
germ-tube-spore germination 36:840, 844
morphology 36:840, 849
sporangial germination 29:417
terminology 24:419
arrhenomanes
antheridia and oogonia 26:679, 682
stunting, sorghum 32:1035
yellowing, sorghum 32:1035
butleri
antheridia and oogonia 28:513
oogonia 28:86
oospores 28:86
pathogen in host 28:513
plasmolysis, internal cells, sugar-beet 28:513
root rot, sugar-beet 28:512
sporangia 28:513
debaryanum
control, by seed treatment 34:494; 36:159
damping-off, sugar-beet 28:450, 451; 34:494
growth in cult., effect chemicals on 38:1136
infection, influenced by age of host tissue, Agropyron sp. 39:110
infection, influenced by distance of inoculum from host, Agropyron sp. 39:106
proof of pathogenicity 34:494; 39:111
dissotocum
antheridia and oogonia 30:193, 195
sporangia germination 30:191, 193
morphology 30:191, 193
zoospore germination 30:191
morphology 30:191

antheridia and oogonia 26:678
infection, influenced by age of host tissue, Agropyron sp. 39:109
[illegible]
oospores 33:228
proof of pathogenicity 39:111
helicoides
antheridia and oogonia 29:413
fruit rot, watermelon 29:409
sporangia germination 29:411
morphology 29:411
zoospore germination 29:411
morphology 29:411
marsipium
antheridia and oogonia 31:500, 501
growth in cult. 31:495
sporangia germination 31:496, 497
morphology 31:496, 497
zoospore germination 31:497
morphology 31:497
mastophoron
antheridia and oogonia 29:1009, 1010
oospore germination 29:1007
sporangia germination 29:1007
morphology 29:1007
megalacanthum
appressoria 29:1020
antheridia and oogonia 29:1020, 1022, 1023
myriotylum
antheridia and oogonia 33:271, 273
growth in cult. 33:268
macroscopic mycelium 33:262, 264, 266
microscopic mycelium 33:268
oospore germination 33:275
morphology 33:271, 273
parasitized by other fungi 33:275, 288, 290
sporangial germination 33:270
morphology 33:270, 275
oedochilum
antheridia and oogonia 31:482, 484, 485
appressoria 31:479
oogonia 28:95
oospore morphology 29:95
sporangial germination 31:481
morphology 28:95, 96; 31:479, 481
zoospore germination 31:479, 481
oligandrum
antheridia and oogonia 36:787, 789, 792, 794, 797
enwrapping other fungi 33:288
fruit distortion, watermelon 36:784
fruit rot, cucumber 36:784
[illegible]
parthenospore germination 36:799
morphology 36:797
sporangial germination 36:786
morphology 36:786
zoospores 36:786, 799

Pythium ostracodes
antheridia and oogonia 33:280, 281
enwrapped by another fungus 33:288
oospore germination 33:284
morphology 33:280, 281
sporangial germination 33:279, 284
morphology 33:278, 279, 284
zoospore germination 33:278
morphology 33:278, 284
paligenes
antheridia and oogonia 31:490, 491
sporangial germination 31:488
morphology 31:488
zoospore germination 31:488
morphology 31:488
paroecandrum
antheridia and oogonia 30:206, 207
sporangial germination 30:204
morphology 30:204
periilum
antheridia and oogonia 30:201
sporangial germination 30:199
morphology 30:199
zoospore germination 30:199
morphology 30:199
periplocum
antheridia and oogonia 29:407
enwrapping other fungi 33:288, 293
fruit rot, watermelon, 29:403
oospore germination 36:804
morphology 36:804
parasitised by other fungi 36:817
parasitising other fungi 33:275, 290, 36:816, 817, 837, 844
sporangia germination 29:405
morphology 29:405
zoospore germination 29:405
morphology 36:804
polymastum
antheridia and oogonia 29:1012, 1014, 1015
sporangia germination 29:1012
morphology 29:1012
selpingophorum
antheridia and oogonia 36:812
appressoria 36:808
growth in cult 36:806
oogonia 36:808
oospores 36:808
parasitised by other fungi 36:816
parthenospores 36:812
sporangia germination 36:808, 810
morphology 36:808,810
zoospore germination 36:810
morphology 36:810

Pythium splendens
proof of pathogenicity 39:169
root rot, Aglaonema sp. 39:169
root rot, Easter Lily 39:169
ultimum
control, hot water 33:736
control, seed treatment 37:655
damping-off, orchid 39:1062
leaf spot, orchid 59:1062
oospores 28:83
proof of pathogenicity 37:655
ring rot, sweet potato 24:808, 810
root lesions, guayule 35:637
root rot, guayule 35:637
root rot, orchid 59:1062
root rot, sweet potato 24:812
sporangia 28:83
zoospores 28:83
undulatum
chlamydospore germination 36:854, 858
morphology 36:852, 854
growth in cult. 36:843
parasitized by other fungi 36:837
sporangia germination 36:854, 858
morphology 36:854, 858
zoospore germination 36:858
morphology 36:858
vexans
antheridia and oogonia 36:826, 827, 831
oospore germination 36:834
morphology 36:828, 834
parasitized by other fungi 36:817, 834, 837
parasitising other fungi 36:817
sporangia germination 36:822
morphology 36:822
zoospore germination 36:822
morphology 36:822
Pythium sp.
conidiophores and conidia 19:564
control, chloropicrin 32:1035
control, by seed treatment 39:78, 80, 82
cotyledon rot, pea 27:584
damping-off, alfalfa 25:422
damping-off, cucumber 27:576
damping-off, pea 27:583
damping-off, spinach 27:577
damping-off, sugar-beet 17:268, 269, 270, 271, 275, 279, 284
distortion, sugar-beet 19:317, 318
head rot, cabbage 15:484
infection, influenced by moisture, [illegible]
infection, influenced by soil temperature, comm. 39:80, [illegible]
oospores 19:564
parasitized by Trichoderma sp. 22:842
proof of pathogenicity 30:757
root rot, sorghum 19:553
root rot, sugarcane 19:551, 552, 553, 556
root rot, wheat 19:553

Ramularia anchusae
conidia 3:242
[illegible]
conidial germination 22:232
morphology 22:232
pathological histology 22:232
sporodochia 22:232
candida
chlamydospores 3:242
conidia 3:242
conidiophores and conidia 3:242
cyclaminicola
conidial germination 40:1031
morphology 40:1031
conidiophores and conidia 40:1028, 1031
conidiophores emerging from stoma 40:1031
leaf spot, cyclamen 40:1028
destructans
chlamydospores 8:569
conidial germination 8:567
[illegible]
conidiophores and conidia 8:567
endospores 8:567
hyphal fusions 8:567
pathogen in host 8:564
pathological histology 8:561
root rot, ginseng 8:558, 559
stroma 8:563
didymum
conidia 3:49
[illegible]
conidia 3:242
macrospora
chlamydospores 3:242
conidia 3:242
conidiophores and conidia 3:242
[illegible]
conidia 3:242
conidiophores and conidia 3:242
obtusa
[illegible]
conidia 3:242
conidiophores and conidia 3:242
sporodochia 3:242
panacicola
chlamydospores 8:569
conidial germination 8:569
morphology 8:569
conidiospores and conidia 8:567
hyphal fusions 8:569
pathogen in host 8:564
pathological histology 8:561
root rot, ginseng 8:558, 559
stroma 8:563

Ramularia primulae
pathological histology 18:739
scabiosa
scab, citrus 26:196
Ramulispora sorghi
conidial germination 36:193, 194, 195
morphology 36:193, 194, 195
conidiophores and conidia 36:193, 194
conidiophores emerging from stoma 36:193, 194
leaf spot, sorghum 36:191
pathological histology 36:193, 194, 195
sclerotia 36:191, 194, 195
sporodochia 36;193, 194, 195
stripe, sorghum 36:191
Rhabditis sp.
captured by fungus 31:783, 790
morphology 26:198
Rhabdospora sp.
stem lesion, Convolvulus sp. 30:777, 778
Rhizidiocystis ananasi
conidiophores and conidia 19:372, 373, 374, 375, 376
Rhizobium leguminosarum (See: Rhizobium radicicola)
Rhizobium radicicola (See: Bacterium radicicola, Pseudomonas radicicola)
Rhizoctonia batatícola
blight, bean 23:953, 954
canker, bean 23:955
sclerotia 22:638, 639, 640, 641
stalk rot, corn 22:638
carotae
clamp connections 38:442
growth in cul. 38:441
macroscopic mycelium 38:441, 442
root rot, carrot 38:441
carotae plus Botryotinia Fuckeliana
root rot, carrot 38:442
carotae plus Sclerotinia sclerotiorum
root rot, carrot 38:442
crocorum
macroscopic mycelium 6:338
microsclerotia
blight, fig 7:111, 112
cytological study of 7:118
growth in cult. 7:118
macroscopic mycelium 7:113
pathogen in host 7:118
pathological histology 7:118
sclerotia 7:112, 118
silvering, fig 7:111
oryzae
growth in cult. 28:235
leaf spot, rice 28:234, 243
macroscopic mycelium 28:238
sclerotia 28:238
ramicola
blight, Elaeagnus sp. 41:616, 617
leaf spot, Elaeagnus sp. 41:616, 617

blight, aster 26:982
blight, Lobelia sp. 19:588
blight, wheat 41:376
"buckskin", iris 39:175
bulb rot, tulip 38:156
canker, alfalfa 33:1082; 35:835; 36:640; 39:929, 950
canker, bean 28:24
canker, celery 39:471, 472
canker, cotton 31:163; 32:642
canker, clover 35:835
canker, pea 16:276
canker, soybean 40:814
canker, sugar-beet 27:1180
canker, tomato 25:754; 39:951
control, seed treatment 37:655
corm rot, gladiolus 35:231
cytological study of 29:760
damping-off, alfalfa 39:929
damping-off, pepper 37:915
disease measurement 34:1059
distribution map 22:829
entrance through stoma, begonia 26:987
fruit rot, tomato 19:585
growth in cult. 7:118; 19:588; 26:837; 28:236; 29:268, 270; 33:173; 34:715, 1058; 38:441
growth in cult., influenced by nutrition 26:837
infection, influenced by soil temperature, alfalfa 36:640
infection cushions, begonia 26:987
leaf spot, cotton 34:600, 601
leaf spot, holly 32:906, 909
leaf spot, rice 28:243
macroscopic mycelium 22:831; 29:793; 32:906
pathogen in host 22:831; 29:760; 32:729; 37:914
pathological histology 32:729; 37:914
penetration, external cells, potato 29:760
petiole lesions, celery 39:471, 472
plant necrosis, gladiolus 35:230, 231
proof of pathogenicity 29:273; 31:54; 34:1061, 1066; 35:712, 835; 37:655; 40:822, 824, 826
root lesions, alfalfa 35:835
root lesions, clover 35:835
root lesions, sugar-beet 31:56
root rot, oat 22:829
root rot, sugar-beet 28:153; 29:795, 799
root rot, wheat 22:829
sclerotia 25:751; 26:837; 28:236; 29:613, 760; 33:173
stunting, Alyssum sp. 20:587
stunting, oat 22:829
stunting, strawberry 35:712
tuber rot, potato 32:729

Rhizoctonia zeae
canker, corn 24:1293
ear rot, corn 24:1291, 1298
growth in cult. 24:1292
leaf spot, rice 28:243
macroscopic mycelium 24:1291
proof of pathogenicity 24:1295
sclerotia 24:1293, 1294, 1295, 1300
Rhizoctonia sp.
canker, Matthiola sp. 31:88
cotyledon rot, pea 27:584
crown rot, carrot 16:368
brown patch, grasses 9:92
damping-off, cucumber 27:576
damping-off, Lupinus sp. 36:480
damping-off, pea 27:583
damping-off, spinach 27:577
damping-off, sugar-beet 17:[illegible]
infection, influenced by depth of planting of seed of host
Lupinus sp. 36:480
mycelium parasitized by Trichoderma sp. 22:838, 839, 841; 24:1136
proof of pathogenicity 30:757
root rot, beet 26:559
sclerotia 8:578
stem lesions, apple 33:256
tumefaction, apple 33:256
wilt, Matthiola sp. 31:88
Rhizophidium pollinis
sporangia germination 4:62
morphology 4:62
zoospores 4:62
Rhizopus nigricans
conidiophores and conidia 6:266
control, fungicides 27:796
growth in cult. 4:320; 24:268
nodosus
growth in cult. 17:460, 465, 468
tritici
growth in cult. 17:460, 465, 468
Rhizopus sp.
fruit rot, tomato 8:580
macroscopic mycelium 8:580; 17:451
mycelium parasitized by Trichoderma sp. 22:842
pathogen in host 10:537
Rhizosphaeria kalkhoffi
conidial germination 37:509
morphology 37:509
abscission, leaf, Picea sp. 37:508
growth in cult. 37:509
pycnidia 37:509
Rimocortius kwanzani
rough bark, cherry 32:429

Roselinia curyae
canker, Carya sp. 12:381
perithecia 12:384
herpotrichioides
abscission, leaf, Tsuga sp. 27:306
asci and ascospores 27:309
conidial germination 27:309
morphology 27:306
perithecia 27:306
subiculata
ascospores 27:309
[illegible]
ascospores 27:309
Roselinia sp.
conidia 4:72
conidiophores and conidia 4:72
ostioles 4:72
perithecia 4:72
Rotylenchus brevis
cracking, Dioscorea sp. 27:866
tuber rot, Dioscorea sp. 27:866
asci and ascospores 6:398
conidia 6:398
Schizoneila colemani
conidia 12:439
fasciculation, Vitis sp. 12:435, 436
Schizoxylon microsporum
apothecia 28:744
asci and ascospores 28:744
canker, Acer spp. 28:740
conidial germination 28:744
morphology 28:744
growth in cult. 28:742
Scirrhia acicola (See also: Lecanosticta acicola; Septoria acicola)
conidial germination 40:727
morphology 40:727
hyphal fusions 40:727
stereoscopic mycelium 40:727
Scleroderris abieticola
apothecia 20:560, 567
asci and ascospores 20:567
canker, Abies sp. 20:560

[illegible], Eragrostis sp. 25:588
oospore morphology 25:588, 590
sporangia 23:538, 590
graminicola
chlorosis, Setaria sp. 26:462
haustoria 28:849
oospore germination 22:244; 27:311
morphology 20:995; 22:243; 28:848; 32:872
pathogen in host 28:849
penetration, external cells, Setaria sp. 27:311; 28:848
penetration, internal cells, Setaria sp. 28:848
sporangial germination 22:584
morphology 22:585
sporangiophores and sporangia 22:584; 25:463
streak, Setaria sp. 26:462
suppression, Pennisetum sp. 22:242
graminicola var. andropogonis-sorghi
downy mildew, Setaria sp. 20:994
oospores 19:1109
sporangial germination 22:590
morphology 22:590
sporangiophores and sporangia 22:590
[illegible]
distortion, oat 32:869
oospores 32:872
noblei
blight, Sorghum sp. 19:1109
oospores 19:1109; 32:207
sporangial germination 32:207
morphology 32:207
sporangiophores and sporangia 32:207
north
blight, Erianthus sp. 19:962
oospores 19:962
sorghi
oospore germination 22:578
morphology 22:578
pathological histology 22:578
splitting of leaves, Sorghum sp. 22:578
sporangial germination 22:578
morphology 22:585
sporangiophores and sporangia 22:584
Sclerotinia americana
apothecia 17:792
conidia 15:538
growth in cult. 15:537
macroscopic mycelium 15:539
camelliae
[illegible]
blight, camellia 30:167
cytological study of 30:169
sclerotia 30:169
cinerea
canker, peach 3:110; 11:292
conidial germination 15:536
morphology 15:538
macroscopic mycelium 15:539

Sclerotinia cinerea f. pruni
growth in cult. 15:537
Sclerotinia fructicola (See also: Monilinia fructicola)
antagonistic to other fungi 38:901
apothecia 29:339, 438; 31:727; 32:635
ascospores 29:339
control, by fungicides 33:548, 686
distribution map 29:347
entrance through stoma 26:1058
genetic studies of 39:624, 626
growth in cult. 29:339, 342; 38:861, 901; 39:624, 626
growth in cult., influenced by nutrition 38:861
losses 23:978
mummification, prune 31:727
proof of pathogenicity 29:342
gladioli
apothecia 24:403
asci and ascospores 24:402
receptive bodies 24:401
spermatia 24:402
sporodochia 24:401
gregaria
apothecia 11:226
intermedia
apothecia 14:324
growth in cult. 14:327; 19:308; 27:103
macroscopic mycelium 31:444
sclerotia 27:103; 31:444
spermatia 14:325
tuber rot, potato 31:444
laxa
blight, apricot 31:720
blight, cherry 31:721; 33:1212; 38:858, 860
blight, peach 31:725
blight, prune 31:727
canker, cherry 38:860
canker, peach 31:725
distribution map 29:347
flower spot, cherry 38:858
growth in cult. 29:342; 33:1212; 38:861, 862
growth in cult., influenced by nutrition 38:861
leaf spot, cherry 38:860
mummification, cherry 31:721, 722
proof of pathogenicity 29:342
sporodochia 29: 344; 31:720, 722, 725; 33:1212; 38:860
libertiana
apothecia 6:256, 269; 12:18; 13:31(spore discharge shown)
blight, celery 12:17
blight, lemon 6:270
growth in cult. 14:327
macroscopic mycelium 6:269, 271, 437, 438
sclerotia 6:256, 269, 437, 438; 10:500; 28:226
stem lesions, tomato 28:226
stem rot, avocado 6:276
stem rot, citrus 6:271
wilt, delphinium 6:225
wilt, sunflower 13:498

[illegible]
growth in cult. 14:327; 19:303, 306; 27:103
sclerotia 27:103
panacis
apothecia 2:30
growth in cult. 2:30
sclerotia 2:30
spermatia 1:29
ricini
apothecia 9:568
appressoria 9:568
asci and ascospores 9:568
ascospore germination 9:568
morphology 9:568
conidia 9:568
conidiophores and conidia 9:568
macroscopic mycelium 9:568
sclerotia 9:568
sclerotiorum
antagonism to itself 26:186
apothecia 15:259; 21:409, 411; 26:187; 27:101; 33:871
canker, hollyhock 24:539
conidia 15:186
"drop", cabbage 15:250, 251
fruit rot, almond 21:410
fruit rot, apricot 21:407, 408
growth in cult. 26:186; 27:103; 41:1102
growth in cult., effect radiation on 20:961
macroscopic mycelium 21:409; 26:186
microscopic mycelium 38:442
penetration, external cells, peach 26:1058
plant necrosis, Carduus sp. 25:962
sclerotia 15:251, 252, 259; 21:409, 413, 1196; 26:186, 187; 27:101, 103, 1048; 30:871; 41:1102
seaveri
blight, Prunus sp. 30:89
trifoliorum
apothecia 7:436; 33:871; 39:159
asci and ascospores 7:437
growth in cult. 7:438
proof of pathogenicity 39:162, 164
sclerotia 7:436, 438; 30:871; 39:159
spermatia 7:437
stem rot, alfalfa 7:435
Sclerotium bataticola
damping-off, Abies sp. 35:431
damping-off, Pinus spp. 35:431
damping-off, Pseudotsuga sp. 35:431
growth in cult. 22:283; 27:914
hyphal fusions 7:341
pathogen in host 3:166
root rot, clover 27:916
root rot, sweet potato 3:166
sclerotia 3:166; 7:311; 27:914
stunting, corn 34:340
tuber rot, potato 34:434

Sclerotium bifrons
sclerotia 10:142
cepivorum
growth in cult. 38:382, 383
growth in cult., influenced by temperature 16:710
infection, influenced by moisture, onion 16:710
infection, influenced by temperature, onion 16:710
macroscopic mycelium 38:379
sclerotia 14:322; 38:383, 384
stem rot, shallot 38:379, 382
delphinii
growth in cult. 17:245; 38:84
macroscopic mycelium 38:84
plant necrosis, Scilla sp. 38:85
sclerotia 17:245
fulvum
blight, Sisymbrium sp. 27:1115
blight, Thlaspi sp. 27:1115
blight, wheat 27:1115
growth in cult. 27:1116
pathogen in host 27:1116
sclerotia 27:1115, 1116
gladioli
dry rot, gladiolus 18:529
pathogen in host 18:522
sclerotia 18:522, 529
spermatia 18:522, 529
rolfsii (See also: Pellicularia rolfsii)
canker, peach 17:440
blight, carrot 21:1129, 1130
bulb rot, Scilla sp. 38:84
control, fungicides 39:275
fruit rot, tomato 8:580
growth in cult. 21:1192; 22:375; 26:251; 41:252
macroscopic mycelium 17:438; 21:1132, 1133, 1192; 22:375; 31:945; 33:616; 36:239
pathogen in host 17:441, 442
parasitized by Trichoderma 22:842
root rot, carrot 21:1131
root rot, Lippia sp. 19:510
sclerotia 8:65, 580; 11:378; 21:1132, 1192; 22:375; 26:1082; 33:615; 36:239; 38:84
seed rot, peanut 37:670
stem lesions, wheat 8:65
stem rot, cotton 21:1192
tuber rot, potato 33:616; 36:239
wilt, cotton 31:944
Selenophoma bromigena
conidial germination 31:954
morphology 31:954
growth in cult. 35:238
leaf spot, Bromus sp. 35:238
pycnidia 35:238
Septoria acicola (See also: Scirrhia acicola)
conidia 19:996
agropyri
conidia 13:20

leaf spot, blueberry 37:489
pycnidia 37:489
stem lesions, blueberry 27:489
apii
conidial germination 22:796
morphology 22:797
growth in cult. 22:799
leaf spot, celery 22:793, 794
mycelial fusions 22:797
penetration, external cells, celery 22:797
pycnidia 22:794
apii graveolentis
conidial germination 22:796
morphology 22:797
growth in cult. 22:799
leaf spot celery 22:793, 794
pycnidia 22:794
aurea (See: Mycosphaerella aurea)
conidia 6.425
avenae
conidia 12:453, 544; 13:20; 24:135
pathogen in host 12:470
pycnidia 12:451
bataticola
growth in cult. 4:320
brevispora
conidia 27:1002
pycnidia 27:1002
bromigena
growth in cult. 29:555
lycopersici
conidial germination 25:797
control, fungicides 9:558
cytological study of 25:791, 793, 797
disease resistance, tomato 35:18
distribution map 14:166, 167, 168, 169
entrence through stoma, tomato 25:791
growth in cult. 35.17
haustoria 25:791
leaf spot, tomato 14:156; 35:18
pathogen in host 25:791
pycnidia 14:156; 25:793; 35:17
maculae (See also: Mycosphaerella populorum)
canker, poplar 36:153
conidia 31:246
nodorum
growth in cult. 12:547; 35:51; 41:576
growth in cult., effect light on 41:576
pathogen in host 12:545
pycnidia 12:542
stem lesions, wheat 35:51

Septoria passerini
conidia 13:33
petroselini
pathological histology 18:732
pisi
blight, pea 3:58
pycnidia 3:58
populicola
conidia 31:246
ribis
conidia 6:421
rubi
conidia 27:1002; 33:990
growth in cult. 33:990
leaf spot, raspberry 33:990
pycnidia 27:1002; 33:990, 992
secalis
conidia 13:20
tritici
conidial germination 12:569, 570
morphology 13:20; 24:135, 139
growth in cult. 12:559, 565, 577; 24:135
leaf spot, oat 24:135
pathogen in host 12:585
penetration, external cells, wheat 12:559
pycnidia 12:562; 24:135
viciae
conidia 30:542
Septoria sp.
leaf spot, celery 20:359
Sorosporium everhartii
sorus 31:1044
reilianum
chlamydospore germination 19:435
morphology 19:435
tumefaction, corn 23:399
reilianum x Sphacelotheca sorghi
suppression, sorghum 25:375
[illegible]
basidia and basidiospores 33:570
basidiospore morphology 33:570
chlamydospore germination 33:570
morphology 33:575
sorus 33:575
Sparassis radicata
heart rot, Pseudotsuga sp. 7:174
mushrooms 7:168, 170
mycelial mat 7:173
Spermoedia sp.
perithecia 5:192
sclerotia 5:192
Sphaceloma ampelinum
acervuli 23:390
arachidis
growth in cult. 35:344
araliae
scab, Aralia sp. 34:982

Sphaceloma fawcettii (See: Elsinoe fawcetti)
conidia 15:102; 23:540
growth in cult. 23:540; 26:69
pathological histology 18:543, 544
scab, citrus 15:99, 100; 20:346, 349; 23:476
sporodochia 20:346
fawcettii scabiosa
acervuli 26:196
conidiophores and conidia 26:196
pathological histology 26:196
scab, citrus 26:196
fawcettii viscosa
acervuli 23:540
conidia 23:540
growth in cult. 23:540
scab, citrus 23:540
lippiae
acervuli 29:655
anthracnose, Lippia sp. 29:655
conidia 29:655
growth in cult. 29:655
stem lesions, Lippia sp. 29:655
murrayae
scab, Salix sp. 34:932
ricini
conidia 35:349
growth in cult 35:344
scab, Ricinus sp. 35:348
rosarum
anthracnose, rose 28:361
symphoricarpi
anthracnose, Symphoricarpus sp. 28:374
fruit rot, Symphoricarpus sp. 18:801
leaf spot, Symphoricarpus sp. 18:801
violae
petiole lesions, pansy 38:927
petiole lesions, violet 38:927
scab, pansy 38:927
scab, violet 38:927
Sphaceloma sp.
anthracnose, Mentha sp. 28:104
conidial germination 28:107
morphology 28:107
growth in cult. 28:107
insect dissemination of spores 20:346
pathogen in host 26:72; 28:107
penetration, internal cells, peppermint 28:106
scab, Hesperethusa sp. 26:72
scab, poinsettia 31:947; 32:336
yellowing, Mentha sp. 28:104
Sphacelotheca cruenta
chlamydospores 5:152, 153
sorus 5:152
suppression, sorghum 5:154

Sphacelotheca destruens (See: S. panici-miliacei)
panici-miliacei
basidia and basidiospores 33:570
basidiospore morphology 33:570
chlamydospore germination 33:570
morphology 33:575
growth in cult. 33:571
sorus 33:575
panici-miliacei x Sorosporium syntherismae
chlamydospores 33:575
growth in cult. 33:582
sorus 33:578
reiliana (See also: S. sorghi)
proliferation, corn 10:329
sorghi (See also: S. reiliana)
basidia and basidiospores 31:256, 257
basidiospores 31:256, 257
chlamydospore germination 31:256, 257
morphology 5:152
growth in cult. 20:244, 247; 24:692
origin of physiologic races 28:657
sorus 5:152; 31:1045
Sphacelotheca sorghi x Sorosporium reilianum
suppression, sorghum 25:375
Sphaeronaemella fragariae
conidia morphology 6:113, 260
perithecia 6:266
Sphaeronema fimbriatum
conidial germination 3:166
morphology 3:166
growth in cult. 3:166
proof of pathogenicity 3:166
pycnidia 3:166
root rot, sweet potato 3:166
Sphaeropsis malorum
conidia morphology 2:190; 15:340
pycnidia 2:190
tumefaciens
tumefaction, citrus 1:64
Sphaeropsis sp.
pathological histology 28:404
Sphaerotheca humuli
powdery mildew, raspberry 18:789, 790
pannosa
powdery mildew, peach 29:283
powdery mildew, rose 29:283
Sphaerulina rubi
asci and ascospores 33:992
cytological study of 33:992
perithecia 33:992
trifolii
ascospore germination 13:121
morphology 13:121
conidia 13:121

Sphaerulina trifolii (cont'd)
growth in cult. 13:126
leaf spot, clover 13:126
penetration, external cells, clover 13:125
perithecia 13:120
Spicaria coccospora
conidia 31:788
heliothis
growth in cult. 28:895, 896
Spongospora subterranea
scab, potato 3:18
spore balls 3:18
Sporocybe azaleae
chlamydospores 30:508
conidial germination 29:518; 30:510
morphology 29:518; 30:508, 510
coremia 29:522; 30:508, 510
fruit spot, Rhododendron sp. 10:278
growth in cult. 29:518; 30:508
pathogen in host 29:518; 30:508
sclerotia 30:508, 510
synnema 30:508, 510
Sporonema oxycocci
conidia 34:438
fruit distortion, apple 34:438
pycnidia 34:438
Sporotrichum carpogenum
growth in cult. 21:1145
malorum
conidia 19:452
fruit rot, apple 19:452
growth in cult. 19:452; 21:1145
pathogen in host, apple 19:452
schenckii
growth in cult. 26:69
Stagonospora curtisii
appressoria 23:780
blight, narcissus 23:770
chlamydospores 23:779
conidial germination 23:779
morphology 23:778, 779
leaf spot, Amaryllis sp. 25:265
leaf spot, Chlidanthus sp. 25:265
leaf spot, Crinum sp. 25:265
leaf spot, Galanthus sp. 25:265
leaf spot, Hippeastrum sp. 25:265
leaf spot, Hymenocallis sp. 25:265
leaf spot, Leucojum sp. 25:265
leaf spot, Lycoris sp. 25:265
leaf spot, Narcissus sp. 25:265
leaf spot, Pancratium sp. 25:265
leaf spot, Sternbergia sp. 25:265
leaf spot, Zephyranthes sp. 25:265
pathogen in host 23:777, 780
penetration, external cells, narcissus 23:780
pycnidia 23:778, 783
scorch, narcissus 23:770, 772, 776

Staphylococcus aureus
growth in cult. 34:761; 35:522
Stemphylium botryosum var. tragopogoni
blight, salsify 32:151
leaf spot, salsify 32:151
congestum
conidia 18:577
solani
conidia 20:517
leaf spot, tomato 20:514
Stemphylium sp.
fruit rot, apple 18:571
growth in cult. 18:569
Stereum gausapatum
growth in cult. 29:506, 507, 510
[illegible]
canker, various hardwoods 31:84
mushrooms 31:84
stem rot, various hardwoods 31:84
purpureum
disease resistance, histological demonstration of, beech 36:631
growth in cult. 20:961
mushrooms 1:178
silvering, apple 1:178
Stigmina platani
conidia 19:669
leaf spot, Platanus sp. 19:668
sporodochia 19:669
Stilbum cinnabarinum (See also: Legalonectria pseudotrichia)
conidia 25:214
sporodochia 25:212, 214
Streptomyces ipomoea (See: Actinomyces ipomoea)
scabies (See also: Actinomyces scabies)
canker, pea 39:445
canker, radish 39:445
canker, soybean 39:445
disease resistance, potato 40:474
growth in cult. 41:993
growth in cult., effect chemicals on 41:993
growth in cult., effect presence of host on 39:453
pathogen in host 39:453; 40:468
pathological histology 39:453, 468
proof of pathogenicity 39:445, 449; 40:466
stem lesions, potato 40:466, 468, 471, 474
Streptomyces sp.
antagonistic to other fungi 38:901
conidia 38:901
growth in cult. 38:901
Strumella coryneoidea
canker, oak 35:673; 41:102
sporodochia 41:102

Synchytrium fragariae
sporangia 39:150
tumefaction, strawberry 39:150
zoospores 39:150
Systremma acicola
asci and ascospores 31:66
ascospore germination 31:66
conidial germination 31:66
morphology 31:66
leaf spot, Pinus sp. 31:63, 64
perithecia 31:64, 66
spermogonia 31:66
stunting, Pinus sp. 31:62, 63

Taphrina caerulescens
growth in cult. 15:70
cerasi (See: Exoascus cerasi)
communis
growth in cult. 15:70
coryli
growth in cult. 15:70
deformans (See also: Exoascus deformans)
ascospore germination 15:72
morphology 15:72
conidia 25:57
control, peach 28:176
curl, peach 25:55; 28:176
cytological study of 25:54, 57, 62
entrance through stoma, peach 15:72
fruit spot, peach 34:346
growth in cult 15:70
pathogen in host 25:54
pathological histology 34:979
penetration, external cells, peach 25:53
Johansonii
ascospore germination 15:72
morphology 15:72
chlamydospore germination 15:72
morphology 15:72
growth in cult. 15:70
mirabilis (See also: Exoascus mirabilis)
growth in cult. 15:70
robinsoniana
hyperplasia, Alnus sp. 28:920
Thecaphora deformans
spore balls 34:713
pustulata
spore balls 34:713

Thecaphora solani
distortion, potato 34:712
pathogen in host 34:712
pathological histology 34:712
sorus 34:712
spore balls 33:1087; 34:712, 713
vascular necrosis, potato 34:712
Thelephora terrestris
mushrooms 37:931
Thelephora sp.
mushrooms 11:142
Thielavia basicola
canker, ginseng 2:190, 196
chlamydospores 2:190, 196
conidia 2:196
conidicphores and conidia 2:190
disease resistance, tobacco 6:175, 176, 178
dwarfing, tobacco 6:168
endospores 2:196
leaf spot, tobacco 35:1024
proof of pathogenicity 6:168
root rot, ginseng 2:196
wilt, cotton 32:753
Thielaviopsis basicola
chlamydospores 32:756
conidial germination 32:756
morphology 32:756
endospores 32:756
growth in cult. 25:1012, 1015; 32:756
growth in cult., influenced by nutrition 32:760
growth in cult., influenced by nutrition, tobacco 32:475
growth in cult., influenced by temperature, tobacco 32:475
pathogen in host 32:756
root lesions, cotton 32:753
vascular necrosis, cotton 32:753, 759
vascular necrosis, tobacco 32:759
Thyrospora carcinaeforme
conidia 15:716
distribution map 15:716
Thyrostroma compactum
canker, Ulmus sp. 26:802
conidia 26:802
tubercles, Ulmus sp. 26:802
Tilletia brevifaciens (See also: T. tritici, dwarf bunt strain)
bunt, wheat 41:1036
caries (See also: T. tritici)
bunt (dwarf type), wheat 39:995
cytological study of (dwarf bunt type) 39:994
chlamydospores 34:588
chlamydospores (dwarf bunt type) 39:992
distortion, wheat 22:662
pathogen in host 22:663
smut balls (dwarf bunt type) 39:995
sorus 34:590
suppression, wheat 19:681, 682, 683, 684

abnormal morphology, wheat 6:22
suppression, wheat 6:22
foetida (See also: T. foetens, T. laevis, T. levis)
chlamydospores 34:588
distribution map 17:173; 20:495
losses 23:976
sorus 34:590
laevis (See also: T. foetida)
dwarfing, wheat 8:108, 109, 111
sorus 8:109, 110, 111
suppression, wheat 8:108, 109, 110, 111
levis (See also: T. laevis, T. foetida)
bunt balls, Lolium sp. 22:866
bunt, Lolium sp. 22:866
chlorosis, wheat 29:457
distortion, wheat 20:667
distribution map 24:1207
dwarfing, wheat 34:127
effect pathogen on host morphology, wheat 26:353
growth in cult. 20:502, 506, 665; 24:1221; 28:519
suppression, wheat 20:667
tritici (See also: T. caries)
basidiospore germination 20:499
morphology 20:499
bunt, wheat 9:181; 32:124
bunt balls, Agropyron spp. 26:883
bunt balls, Hordeum sp. 26:883
bunt balls, wheat 22:849; 25:1092; 26:356; 32:124
chlamydospore germination 25:1095, 1097
morphology 23:483; 31:75
cytological study of 25:1095, 1097
disease resistance, histological study of, wheat 20:644
dwarfing, Agropyron sp. 29:578
dwarfing, wheat 8:108, 109, 111
effect pathogen on host morphology, wheat 26:353
growth in cult. 20:502, 507; 28:519; 31:79
pathogen in host 20:642, 644, 648, 650
sorus 8:109, 110, 111
suppression, Agropyron sp. 26:882
suppression, Hordeum sp. 26:882
suppression, rye 13:211; 21:438, 439
suppression, Sitanion sp. 29:577
suppression, wheat 8:108, 109, 110, 111; 23:484
tumefaction, wheat 22:848
tritici plus Claviceps purpurea
suppression, wheat 28:145
tritici plus Ustilago tritici
suppression, wheat 28:145

Tilletia tritici (dwarf bunt strain) (See also: T. brevifaciens)
basidia and basidiospores 33:733
basidiospores 33:733
chlamydospore germination 33:76, 77, 733
morphology 31:75; 34:588
dwarfing, wheat 31:80
tumefaciens
fasciculation, Panicum sp. 34:144
tumefaction, Panicum sp. 34:144
Tilletia spp.
suppression, Agropyron spp. 26:881
Titaeospora andropogonis
conidia 33:223
sclerotia 35:738
stripe, sorghum 35:738
detospora
acervulus 36:195
spore fusions 36:194
Tolyposporium filiferum
chlamydospore germination 23:987, 988
morphology 23:987,988
growth in cult. 23:990
suppression, sorghum 23:985
Torula ligniperda
conidia 12:374
pathogen in host 12:374
marginata
conidiophores and conidia 35:96
Trametes serialis
chlamydospores 33:982
growth in cult. 33:980
suaveolens
mushrooms 33:329
Tranzschelia pruni-spinosae
abscission, leaves, prune 41:195
leaf spot, Prunus spp. 35:573
shot-hole, Prunus spp. 35:573
sorus 29:645
pruni-spinosae discolor
teliospore germination 31:191
morphology 31:191
pruni-spinosae typica
basidia and basidiospores 29:76; 31:191
basidiospores 29:76
teliospore germination 29:76
morphology 29:76
punctata
fruit spot, peach 21:140
haustoria 21:136, 138
uredinia 21:136, 138, 139
uredinoid germination 21:147
urediospore germination, affected by fungicides 18:360; 21:150, 151, 152
morphology 21:138, 139
Tranzschelia sp.
leaf spot, peach 21:135

Trichoderma koningi
root rot, apple 6:161
koningi
chlamydospores 1:188
conidial germination 1:188
morphology 1:188
conidiophores and conidia 1:188
growth in cult. 1:188
root rot, sweet potato 1:188
lignorum
chlamydospores 1:188
conidial germination 1:188
morphology 1:188
conidiophores and conidia 1:188; 24:1376
growth in cult. 1:188
infection, influenced by association of organisms 39:1011
parasitising other fungi 24:1156
root rot, sweet potato 1:188
sheath spot, rice 24:1375
Trichoderma sp.
[illegible]
antagonistic to other organisms 25:565; 41:679
Trichoseptoria fructigena
conidial germination 30:329
morphology 30:329
conidiophores and conidia 30:329
fruit rot, apple 30:329, 331
pycnidia 30:329, 331
Trichothecium arrhenopum
appressoria 33:228
conidia 33:228
roseum
conidial germination 41:657
conidial morphology 41:637
conidiophores and conidia 41:637, 638
fruit rot, tomato 41:634
Trinacrium subtile
conidiophores and conidia 28:86
Tubercularia fici
canker, fig 1:16
conidial germination 1:15
morphology 1:15
sporodochia 1:15
maxima
conidial germination 25:257
sporodochia 25:257
ulmea
canker, Ulmus sp. 37:244
conidiophores and conidia 37:244
dieback, Ulmus sp. 37:244
sporodochia 37:244
vulgaris
sporodochia 34:986
Tuberculina maxima
conidia 25:256

morphology 19:618, 620, 621
pathogen in host 19:625, 626
root lesions, cowpea 19:629
root lesions, pineapple 19:612, 615,
diseases
blight, narcissus 14:502
bulb rot, Chionodoxa sp. 23:621
bulb rot, Colchicum sp. 23:621
bulb rot, iris 23:103, 104
bulb rot, narcissus 22:927
control 14:500
dwarfing, narcissus 14:49
leaf spot, Digitalis sp. 23:621
oleander
pathogen in host, rice 24:25
oilseeds
core rot, cacao 21:317
pathogen in host, cacao 21,318, 321
orchid
pathogen in host, rye 3:234
dwarfing, rye 3:234
dwarfing, wheat 7:405
pathogen in host
ornamentals
grown in soil, 20:569
weed, cereals and grasses 23:864, 865
sclerotia 23:865, 868, 902
snowmold, grass 2
pasture
disease rca scales, grass 31:941
snowmold, grass 31:941

Uredo (See also U. tritici)
bastida and basidiospores 39:337
chlamydospore germination 39:337
[illegible] 39:337
[illegible] 39:337
cytological study of 39:347
fusicoutation, [illegible] sp. 39:[illegible]
growth in soil, 39:346
[illegible]
[illegible] ring, [illegible] sp. 29:[illegible]
spore balls 29:[illegible]
[illegible]fection, Brassica sp. 28:[illegible], [illegible]
[illegible]
[illegible]ation, Tagetis sp. 28:[illegible]
[illegible]
[illegible] 39:[illegible]
[illegible] 39:[illegible], [illegible]
[illegible] 39:[illegible]

morphology 24:876, 878, 881
cytological study of 24:876, 878,, 884; 30:931
growth in cult. 30:584
pathogen in host, rye 30:931, 932
penetration, external cells, rye 30:929, 930
[illegible]
tritici (See also: U. agropyri)
flag smut, wheat 41:1036
Uromyces appendiculatus
aecia 14:78
rust, bean 18:168
uredospore germination 14:78
morphology 14:70, 78
erythroni
aeciospore germination 25:459
morphology 25:459
fallens
infection, influenced by age of tissues, clover 24:804
infection, influenced by host nutrition, clover 24:800, 801
hobsoni
aecia 29:785
basidia and basidiospores 29:785
[illegible]
morphology 29:785, 786
basidiospore germination 29:7[illegible]
curl, Jasmium sp. 29:786
cytological study of 29:784, 785, 786
sorus 29:784
spermogonia 29:784, 785, 788
[illegible]
[illegible]
[illegible]
[illegible]
typica
disease measurement 27:1092
[illegible]
disease resistance, alfalfa 32:1052, 1053
uredia 32:1049, 1052, 1053, 1054
yellowing, alfalfa 32:1052
vignae
aecia 14:78
aeciospores 14:70
basidia and basidiospores 14:70
teliospore germination 14:70
morphology 14:70
urediniospores 14:70, 78
Ustilaginoidea virens
conidia 19:590
sclerotia 19:592
Ustilago avenae
chlamydospore germination 27:549
germination, effect substrate on 33:202
morphology 21:839
zeamae 27:549
growth in cult. 18:956, 972; 21:840
penetration, external cells, oat 27:549
aporidial fusions 27:549
suppression, oat 21:838

disease resistance 36:441
bromivora (See also: U. bullata)
chlamydospores 16:476
suppression, Western rye grass 16:474
bullata (See also: Ustilago bromivora)
chlamydospores 41:843
suppression, Elymus sp. 30:1010
suppression, Hordeum nodosum 30:1009
bullata x U. hordei
chlamydospores 41:843, 846, 847, 848
coicis
suppression, Coix sp. 10:332
crameri
basidia and basidiospores 33:1124, 1128
cytological study of 33:1124, 1128
growth in cult. 33:1127
hyphal fusions 33:1126
hordei (See also: U. levis)
basidia and basidiospores 31:179
chlamydospore germination 31:179
germination, effect of radiation on 31:179
germination, effect of substrate on 33:202
morphology 32:638; 41:843
growth in cult. 18:966, 968
suppression, barley 35:973
hordei, race 7
suppression, barley 35:973
hordei, race 12
suppression, barley 35:973
hordei x U. bullata
chlamydospores 41:843, 846, 847, 848
levis (See also: U. hordei)
basidia and basidiospores 34:482
chlamydospore germination 34:482
germination, as affected by substrate 33:202
growth in cult. 18:968, 969; 21:841, 859
penetration, external cells, oat 34:482
maydis (See: Ustilago zeae)
nigra
basidia and basidiospores 33:201
chlamydospore germination 31:285; 33:195, 201
germination, effect substrate on 33:202
morphology 33:195, 201
infection, influenced by age of host tissue, barley 33:203
suppression, barley 33:203
nuda (See also: U. tritici)
basidiospores 33:195
chlamydospore germination 31:285; 33:195
morphology 31:285; 33:195
growth in cult. 16:1003; 18:962, 964, 965, 978
shiraiana
suppression, bamboo 6:352

Ustilago striaeformis (See also: U. striiformis)
chlamydospore germination 14:266, 36:99, 33:711; 36:60
chlamydospore morphology 14:266; 36:64
growth in cult. 30:105; 33:711; 36:62, 63; 37:731, 732
growth in cult., effect nutrition on 30:107
hyphal fusions 30:100
pathogen in host, timothy 14:266
plant necrosis, Kentucky blue grass 33:1057
suppression, timothy 14:266
striiformis (See also: U. striaeformis)
basidia and basidiospores 37:731
chlamydospore germination 37:731
morphology 37:731, 733
striiformis f. poae-pratensis
chlamydospore germination 36:882
morphology 36:880, 881
cytological study of 36:877, 879, 882, 883
growth in cult. 36:880, 881
tritici (See also: U. nuda)
chlamydospore germination 13:128, 135, 136
morphology 15:599
growth in cult. 16:1003; 18:960, 964, 974
suppression, rye 15:601
suppression, wheat 15:603
tritici plus Tilletia tritici
suppression, wheat 28:145
zeae
basidia and basidiospores 29:479; 33:752
basidiospore morphology 19:442; 29:479
chlamydospore germination 19:442; 29:479; 31:335, 338; 33:752
morphology 28:860
cytological study of 24:1015, 1017; 33:752
growth in cult. 16:979, 980, 982, 17:986, 990, 21:[illegible], 23:[illegible] 33:[illegible]
pathogen in host 19:442
penetration, external cells, corn 19:442; 24:1015, 1017
suppression, corn 19:985, 908
tumefaction, corn 16:988, 989, 990, 994
Ustulina vulgaris
conidia 17:146
zonata
conidia 17:146
mushrooms 17:144, 146
perithecia 17:146

V

Valsa sordaria
asci and ascospores 30:462
growth in cult. 30:466
perithecia 30:462
pycnidia 30:466

Valsa [illegible] (see: Cytospora [illegible])
Venturia cerasi
conidia germination 18:326, 327
morphology 18:326, 327
inaequalis
asci and ascospores 32:854
control, fungicides 20:546
growth in cult. 24:23, 32
pathogen in host 18:382, 383, 418
penetration, external cells, apple 21:482
perithecia 18:418; 32:854
scab, apple 30:175
pirina (See also: Fusicladium pirinum
growth in cult. 32:359, 361, 364
perithecia 32:364
Verticillium albo-atrum
abscission, leaves, cotton 40:499
chlorosis, Helichrysum sp. 31:1131
dieback, pepper 29:360
disease resistance, boysenberry 40:1106
disease resistance, cotton 40:499, 508
disease resistance, tomato 41:987
distribution map 22:771
dwarfing, tomato 41:987
growth in cult. 24:1266; 31:1132, 1136, 1137; 40:502, 505
infection, influenced by soil temp., tomato 23:140, 142
macroscopic mycelium 23:120
proof of pathogenicity 29:360; 30:772; 31:1133; 39:680
vascular necrosis, avocado 39:678
vascular necrosis, Helichrysum sp. 31:1131
vascular necrosis, sugar-beet 30:771
wilt, avocado 39:677
wilt, boysenberry 40:1105, 1106
wilt, pepper 29:360
wilt, sugar-beet 30:770
wilt, tomato 41:987
yellowing, boysenberry 40:1106
Verticillium albo-atrum var. ovatum
infection, influenced by pH, eggplant 24:912
wilt, eggplant 24:907
dahliae
infection, influenced by soil temperature, eggplant 21:124
infection, influenced by soil temperature, tomato 23:140, 142
sclerotia 23:120
vascular necrosis, elm 16:614
vascular necrosis, maple 16:614
Verticillium sp.
conidia 13:218
pathogen in host 13:224
tuber rot, potato 9:44
Virus (unidentified)
blight, sugar-beet 21:290, 291, 293
chlorosis, Cineraria sp. 34:942, 943
Virus, Abutilon mosaic
chlorosis, Abutilon sp. 29:696

Virus, alfalfa dwarf
stunting, alfalfa 21:73
alfalfa mosaic
chlorosis, alfalfa 24:240, 242, 243; 32:538; 36:143
chlorosis, celery 32:538; 40:982
chlorosis, clover 36:143
chlorosis, cucumber 36:143; 40:982
chlorosis, Datura sp. 40:982
chlorosis, pepper 40:982
chlorosis, tobacco 36:146
curl, alfalfa 24:240
distortion, cucumber 36:143
distortion, potato 40:974, 976
distortion, tobacco 36:146
infection with this virus prevented by prior infection with potato calico virus, tobacco 30:446
leaf spot, bean 40:982
leaf spot, pea 40:982
leaf spot, tobacco (oak leaf pattern) 40:932
ring spot, alfalfa 40:982
savoying, alfalfa 24:242
systemic necrosis, potato 40:974, 975
vascular necrosis, potato 40:974, 976, 977
veinbanding, pepper 40:982
alfalfa witches' broom
fasciculation, alfalfa 36:765
fasciculation, Lathyrus sp. 41:457
fasciculation, Lotus sp. 41:457
fasciculation, Medicago sp. 41:457
fasciculation, Melilotus sp. 41:457
stunting, alfalfa 36:766
stunting, clover 36:766
stunting, Medicago sp. 36:766
Virus, alfalfa virus 2
chlorosis, alfalfa 27:839
distortion, alfalfa 27:839
dwarfing, alfalfa 27:839
leaf spot, bean 24:96, 97; 27:839
Virus, Amaryllis mosaic
morphology 41:88
Virus, apple
rough bark, apple 32:436
Virus, apricot
distortion, apricot 32:180
pathological histology 32:180
ring-spot, apricot 32:180
veinclearing, apricot 32:180
Virus, apricot-plum
chlorosis, apricot 31:327
chlorosis, peach 31:327
distortion, apricot 31:327
hypoplasia, apricot 31:327
ring-spot, peach 31:327

Virus, Arabis mosaic
chlorosis, bean 34:327
ring-spot, tobacco 34:325
savoying, tobacco 34:325
Virus, asparagus bean
chlorosis, asparagus bean 32:519, 520
curl, asparagus bean 32:520
[illegible], asparagus bean 32:519
Virus, aster yellows
color breaking, Phlox sp. 33:742
dwarfing, Erigeron sp. 21:375
heterotophy, potato 30:1050
losses 32:804
proliferation, Phlox sp. 33:742
virescence, Phlox sp. 33:742
yellowing, endive 32:804
yellowing, gladiolus 38:582
yellowing, Phlox sp. 33:742
Virus, avocado sunblotch
blotch, avocado 29:538
pathological histology 24:616
Virus, Azuki bean mosaic
pathological histology 12:296
Virus, bean
losses, bean 20:473
seed spot, bean 33:744
Virus, bean mosaic
chlorosis, bean 20:471, 474, 475; 40:849
distortion,, bean 40:849
fruit spot, bean 33:744
pathological histology 40:76
savoying, bean 20:471
suppression, bean 20:472
vein discoloration, bean 33:744
Virus, bean yellow mosaic, gladiolus strain
chlorosis, bean 40:849
distortion, bean 40:849
yellowing, bean 40:849
Virus, broad bean mild mosaic
chlorosis, Melilotus sp. 29:449
chlorosis, Vicia spp. 29:449
Virus, lima bean mosaic
chlorosis, lima bean 38:171; 41:232
curl, lima bean 41:232
Virus, bean pod mottle
chlorosis, bean 40:1007
leaf spot, bean 40:1007
Virus, bean 1
top necrosis, bean 40:73
Virus, bean 2
cell inclusions 31:761
chlorosis, bean 27:839; 40:688
chlorosis, clover 40:690, 691
chlorosis, pea 27:838; 40:686, 687
dwarfing, bean 40:688
epinasty, bean 40:688

Virus, bean [illegible]
chlorosis, bean 41:868
fruit spot, bean 41:869
pathological histology 41:869
systemic necrosis, bean 41:868
Virus, beet mosaic
chlorosis, beet 11:352, 353, 354
Virus, blackberry mosaic
chlorosis, blackberry 38:828, 829
chlorosis, raspberry 38:828, 829
Virus, blackberry dwarf
chlorosis, blackberry 17:639
distribution map 17:630
dwarfing, blackberry 17:631, 632, 633
rosetting, blackberry 17:641
savoying, blackberry 17:634, 635, 636
Virus, cabbage black ring
morphology 40:959, 960
Virus, cabbage mosaic
disease resistance, cabbage 41:1087
dwarfing, cabbage 41:1088
Virus, cabbage mosaic, B component
chlorosis, cabbage 41:1088
Virus, canna mosaic
chlorosis, canna 38:232
Virus, carnation
streak, carnation 35:38
yellowing, carnation 35:38
Virus, carnation mosaic
chlorosis, carnation 33:824, 825; 35:38
leaf spot, carnation 33:824
streak, carnation 33:824
Virus, celery mosaic
chlorosis, bean 24:92, 95
chlorosis, celery 12:152, 154; 24.50, 51, 52
chlorosis, Commelina sp. 24:50, 51
chlorosis, Lilium sp. 27:563
curl, celery 12:152, 154
leaf spot, Lilium sp. 27:563
yellowing, Commelina sp. 25:951
Virus, southern celery mosaic
chlorosis, celery 24:696, 713
chlorosis, Commelina sp. 24:696
chlorosis, cucumber 24:715
chlorosis, tobacco 24:719
chlorosis, zinnia 25:949
dwarfing, pepper 25:305
dwarfing, squash 25:305
dissemination of 25:291, 294, 295, 296, 297
leaf spot, corn 25:952
leaf spot, cowpea 25:950
leaf spot, cucumber 24:700
leaf spot, tobacco 24:719
losses 25:298, 299, 300
savoying, celery 24:696

chlorosis, banana 24:1033
chlorosis, Commelina sp. 24:1036
chlorosis, corn 24:1036
distortion, banana 24:1033
dwarfing, corn 24:1036
rosetting, banana 24:1033
Virus, cherry
line pattern, cherry 31:1007
line pattern, peach 31:1008
veinclearing, cherry 31:456
Virus, cherry banded chlorosis
chlorosis, cherry 32:434
Virus, cherry buckskin
anthocyanescence, cherry 21:352
buckskin, cherry 31:918; 40:708, 709
leaf spot, cherry 31:918
mummification, cherry 31:[illegible]
Virus, little cherry
infection, influenced by light, cherry 41:147
Virus, cherry mild rugose mosaic
chlorosis, cherry 40:995, 996
distortion, cherry 40:995, 996
ring-spot, cherry 40:995
Virus, cherry rasp leaf
distortion, cherry 32:434, 33:621
mutations, cherry 32:434; 33:627
rasp leaf, cherry 33:621
Virus, cherry ring spot
disease resistance, [illegible]
Virus, cherry rusty mottle
[illegible]
Virus, cherry tatter leaf
distortion, cherry 36:78
distortion, plum 36:78
leaf spot, cherry 36:78
leaf spot, plum 36:78
shot-hole, cherry 36:78
shot-hole, plum 36:78
Virus, cherry yellows
chlorosis, Prunus sp. 33:460
dieback, peach 38:512
dissemination of 38:751
growth stimulation by, cherry 33:[illegible], 460
ring spot, cherry 38:512
ring spot, peach 38:512
ring spot, Prunus sp. 33:460, 461
rosetting, cherry 39:32
rosetting, peach 32:715, 717; 38:512
suppression, cherry 38:512
yellowing, cherry 32:715; 33:460, 464; 38:512
Virus, cytoplasmic stunt
[illegible]

Virus, chrysanthemum Q
leaf spot, chrysanthemum 41:943
Virus, citrus convex gum
tumefaction, Citrus sp. 33:395
Virus, citrus corky bark
tumefaction, citrus 33:861
Virus, citrus knobby bark
tumefaction, citrus 33:861
Virus, citrus scaly bark
pathological histology 24:616
Virus, citrus psorosis
bark scaling, citrus 24:660; 32:412
chlorosis, citrus 24:662, 663
control, chemicals applied to bark 34:243
dissemination of 34:372
pathological histology 37:151
root-grafts, citrus 34:373
Virus, citrus psorosis A
bark scaling, citrus 33:841
chlorosis, citrus 33:838
distribution map 34:362
intumescence, citrus 33:841
pathological histology 33:843, 844, 866, 867, 868, 870, 876, 877
Virus, citrus psorosis B
bark scaling, citrus 33:848
chlorosis, citrus 33:838, 849
fruit spot, citrus 33:851
pathological histology 33:848
Virus, citrus blind-pocket chlorosis
bark scaling, citrus 33:855
chlorosis, citrus 33:838
cracking, citrus 33:855
pathological histology 33:856
Virus, citrus crinkly-leaf psorosis
chlorosis, citrus 33:838, 839
savoying, lemon 33:859
Virus, citrus concave-gum psorosis
chlorosis, citrus 33:838
cracking, citrus 33:852
pathological histology 33:853
Virus, citrus oak leaf pattern of psorosis
chlorosis, citrus 33:839
Virus, citrus quick decline
stem lesions, citrus 41:788
veinclearing, citrus 41:786
Virus, citrus tristeza, mild strain
yellowing, citrus 41:116
Virus, citrus tristeza, severe strain
yellowing, citrus 41:109, 116
Virus, clover ring-spot
leaf spot, clover 23:746
Virus, red clover vein-mosaic
chlorosis, clover 27:1053; 41:815, 816
chlorosis, broad bean 41:816
chlorosis, pea 27:1054; 41:816
chlorosis, Vicia faba 27:1055
dwarfing, pea 27:1054; 41:814

Virus, sweet clover
chlorosis, clover 11:147; 24:250
chlorosis, petunia 24:253
curl, sweet clover 24:250
ring-spot, tobacco 24:251, 252
savoying, sweet clover 24:250
spot-necrosis, petunia 24:253
Virus, white clover mosaic
chlorosis, clover 36:143, 144
chlorosis, tobacco 36:146
Virus, white clover 1
blight, pea 27:838
chlorosis, bean 27:839
chlorosis, pea 27:838
Virus, Coleus
chlorosis, Coleus 35:225, 226
distortion, Coleus 35:226
Virus, Commelina mosaic (Hawaiian)
infection with this virus "protects" against subsequent infection with
cucumber mosaic, zinnia 31:757
Virus, cowpea mosaic
chlorosis, cowpea 31:421
Virus, cranberry false blossom
chlorosis, Nicotiana sp. 35:813
control, by heat 35:814, 818
distortion, Nicotiana sp. 35:813
false blossom, cranberry 23:671
fasciculation, Nicotiana sp. 35:813
rosetting, periwinkle 35:814
Virus, Crotalaria mosaic
chlorosis, Crotalaria sp. 40:514
distortion, Crotalaria sp. 40:514
Virus, Crotalaria incana mosaic
dwarfing, Crotalaria sp. 40:514
veinclearing, Crotalaria sp. 40:514
Virus, crucifer mosaic
chlorosis, cabbage 25:641
leaf spot, tobacco 25:641, 642
Virus, cucumber mosaic
chlorosis, Commelina sp. 25:951
chlorosis, cowpea 24:757, 758
chlorosis, cucumber 6:144
chlorosis, Lilium sp. 27:563
chlorosis, muskmelon 24:821
chlorosis, Nicotiana spp. 16:150; 19:123
chlorosis, pepper 19:123
chlorosis, Physalis spp. 15:764; 16:150; 19:123
chlorosis, spinach 20:104; 23:457, 460
chlorosis, sugar-beet 23:452
chlorosis, tobacco 16:150; 19:119, 123; 21:504; 24:744, 747
chlorosis, zinnia 29:904
curl, spinach 23:457
distortion, cowpea 24:759
distortion, cucumber 6:144
distortion, dodder 34:159
distortion, lily 34:541

Virus, cucumber mosaic (cont'd.)
fern leaf, tomato 20:28, 30, 31, 39; 21:757; 22:631
infection with this virus fails to "protect" against subsequent infection with potato virus Y, Physalis sp. 40:446, 448
infection with this virus prevented by previous infection with Hawaiian Commelina mosaic virus, zinnia 31:757
leaf spot, corn 25:952
leaf spot, cowpea 24:752; 25:950
leaf spot, Lilium sp. 27:563
leaf spot, Nicotiana sp. 24:443
leaf spot, sugar-beet 25:452
leaf spot, Vigna sp. 34:296
morphology 37:35
ring-spot, Gloriosa sp. 34:542
yellowing, tobacco 24:749
Virus, Doolittle's cucumber mosaic
infection with this virus "protects" against subsequent infection with strain 6 of cucumber mosaic virus, zinnia 29:904
Virus, Porter's cucumber mosaic
infection with this virus "protects" against strain 6 of cucumber mosaic, zinnia 25:778
infection with this virus does not "protect" against infection with tobacco mosaic virus, strain 302A, zinnia 25:757
Virus, cucumber mosaic plus lily mottle
dwarfing, lily 34:533, 536
Virus, cucumber 1
chlorosis, cucumber 32:777
chlorosis, lily 30:172
chlorosis, tobacco 30:173
color break, tulip 30:173
disease resistance, cucumber 32:777, 778, 779
distortion, cucumber 32:777
leaf spot, lily 30:251
leaf spot, sugar-beet 34:906
Virus, cucumber 1, lily strain
dwarfing, tulip 31:840
Virus, cucumber mosaic, strain 6
chlorosis, Lilium sp. 27:563
infection with this virus prevented by previous infection with Doolittle's cucumber mosaic virus, zinnia 29:904
infection with this virus prevented by previous infection with Mertensia mosaic virus, zinnia 38:65
infection with this virus not prevented by previous infection with severe-etch virus, zinnia 25:779
infection with this virus prevents subsequent infection with "passage" strain of lily mosaic virus, zinnia 27:566
infection with this virus "protects" against subsequent infection with Porter's cucumber mosaic, zinnia 25:778
leaf spot, corn 25:952
leaf spot, Lilium sp. 27:563
leaf spot, zinnia 25:778, 779, 949; 27:566; 38:65
yellowing, Commelina sp. 25:951

Virus, red currant
chlorosis, red currant 29:370
veinbanding, red currant 29:370
Virus, delphinium
chlorosis, delphinium 24:471
chlorosis, Lactuca sp. 24:478
chlorosis, Stellaria sp. 24:478
curl, tomato 24:475
dwarfing, delphinium 24:470, 471
dwarfing, Lactuca sp. 24:478
leaf spot, Nicandra sp. 24:478
leaf spot, tobacco 24:474
prolepsis, delphinium 24:470, 472
savoying, delphinium 24:471
Virus, delphinium plus tobacco mosaic virus
curl, tomato 24:477
fernleaf, tomato 24:476, 477
Virus, elm mosaic
canker, elm 40:1019
chlorosis, elm 33:1197
distortion, elm 33:1197
fasciculation, elm 33:1198, 1199
leaf spot, elm 40:1020
Virus, elm phloem necrosis
pathological histology 34:820, 822, 824
Virus, fig mosaic
abscission, leaf, fig 23:893
chlorosis, fig 23:888, 890, 891; 31:562
fruit spot, fig 33:720, 722
Virus, filaree red leaf
chlorosis, Erodium sp. 41:222
curl, Erodium sp. 41:225
distortion, Erodium sp. 41:222
distortion, Geranium sp. 41:225
dwarfing, Erodium sp. 41:222
dwarfing, Geranium sp. 41:225
Virus, gladiolus mosaic
chlorosis, gladiolus 18:217; 34:594
Virus, gladiolus broken petal
pathological histology 24:614
Virus, Pierce's disease of grape
chlorosis, clover 41:925
chlorosis, grape 41:925
dissemination of 36:120,121
dwarfing, clover 41:925
scorch, clover 41:925
scorch, grape 41:924
Virus, grape mosaic
chlorosis, grape 35:941
yellowing, grape 41:941
Virus, Hemerocallis mosaic
pathological histology 24:607
Virus, Holodiscus discolor
fasciculation, Holodiscus sp. 21:924
Virus, Iris tectorum mosaic
pathological histology 24:608

Virus, lettuce big vein
infection, effect temperature on 32:543
tumefaction, lettuce 24:1254; 32:543
Virus, lettuce Rio Grande
distortion, lettuce 6:304
Virus, lily latent (LT)
chlorosis, Lilium spp. 34:721, 724, 725
color break, tulip, 34:722
Virus, lily coarse mottle (CM)
chlorosis, Lilium spp. 34:721, 724, 725
chlorosis, tulip 34:725
color break, tulip 34:722
distortion, lily 34:726
dwarfing, Lilium spp. 34:723, 727
leaf spot, Lilium sp. 34:726
proof of pathogenicity 34:723
systemic necrosis, lily 34:723
Virus, lily virulent coarse mottle (VCM)
chlorosis, Lilium spp. 34:721, 724, 725, 739
chlorosis, Ornithogalum sp. 34:719
chlorosis, tulip 34:725
color break, tulip 34:722
dwarfing, lily 34:723
fern leaf, lily 34:718
proof of pathogenicity 34:723
systemic necrosis, lily 34:723
Virus, lily mosaic
chlorosis, Lilium spp. 19:316; 27:563
leaf spot, Lilium sp. 27:563
leaf spot, tobacco 27:564
Virus, lily mosaic, passage strain
chlorosis, cucumber 27:565
chlorosis, tobacco 27:565
chlorosis, zinnia 27:566
[illegible] with this virus "protects" against subsequent infection
with strain 6 of cucumber mosaic virus, zinnia 27:566
Virus, lily necrotic fleck
chlorosis, lily 34:532, 540
distortion, lily 34:532, 533, 546
flower spot, lily 34:534
leaf spot, lily 34:532, 533, 535, 536, 540, 546
yellowing, lily 34:532
Virus, lily rosette
dwarfing, lily 38:850
pathological histology 41:68
rosetting, lily 34:543, 547; 35:130; 38:850
Virus, lovage mosaic
chlorosis, Ligustrum sp. 34:336
leaf spot, Nicotiana sp. 34:337
ring spot, tobacco 34:337
systemic necrosis, cucumber 34:336

infection with this virus "protects" against subsequent infection with strain 6 of cucumber mosaic virus, zinnia 38:65
Virus, narcissus mosaic
chlorosis, narcissus 29:893
Virus, narcissus white streak
streak, narcissus 29:893
Virus, Nicotiana glutinosa mosaic
chlorosis, Nicotiana sp. 15:547
Virus, Nicotiana 6
morphology 29:254
Virus, Odontoglossum ring spot
morphology 41:651
Virus, onion yellow dwarf
cell inclusions 27:1028
dwarfing, onion 19:74
Virus, orchid mosaic
chlorosis, Cymbidium sp. 41:403, 406, 412
color break, Cattleya sp. 39:1057
ring spot, Cymbidium sp. 41:403, 406, 412
scorch, Cymbidium sp. 41:412
Virus, orchid ring spot
ring spot, Odontoglossum sp. 41:649
Virus, Ornithogalum mosaic
chlorosis, Ornithogalum sp. 34:719
Virus, papaya ring spot
chlorosis, papaya 39:199, 201
distortion, papaya 39:200
ring spot, papaya 39:201
savoying, papaya 39:197
Virus, pea mosaic
chlorosis, pea 15:772; 25:164
chlorosis, Vicia sp. 25:163
distortion, pea 24:79
enations, clover 25:163
Virus, pea mottle
chlorosis, bean 32:109
chlorosis, pea 32:105
chlorosis, spinach 32:109
dwarfing, bean 32:109
yellowing, cucumber 32:109
Virus, pea mottle plus pea wilt
streak, pea 32:105
Virus, pea streak
chlorosis, clover 39:841
wilt, pea 39:838, 839
Virus, Wisconsin pea streak
chlorosis, broad bean 41:816
chlorosis, clover 41:816
chlorosis, pea 41:816
dwarfing, pea 41:814
morphology 40:1002, 1003, 1005

Virus, pea mild
chlorosis, bean 32:105
leaf spot, cowpea 32:105
leaf spot, Phaseolus sp. 32:109
ring spot, broad bean 32:109
Virus, pea 1
chlorosis, pea 27:246, 248
distortion, pea 27:246, 248, 838
enations, pea 27:247, 838
leaf spot, pea 27:247, 838
leaf spot, Vicia sp. 28:925
veinclearing, pea 27:246, 248
Virus, pea 2
cell inclusions 31:761
chlorosis, bean 27:594
chlorosis, clover 27:593
chlorosis, pea 27:593
chlorosis, Vicia sp. 27:592
Virus, pea 2A
chlorosis, pea 27:248
Virus, pea 2B
chlorosis, pea 27:248
Virus, pea 2C
chlorosis, pea 27:248
Virus, pea 3
chlorosis, bean 27:713
chlorosis, clover 27:713
chlorosis, pea 27:712, 713, 838
stem necrosis, Lupinus sp. 27:713
veinclearing, clover 27:713
veinclearing, pea 27:712
Virus, peach
rosetting, peach 10:108; 31:353
Virus, peach asteroid spot
leaf spot, peach 28:278; 39:600
shot-hole, peach 28:279
yellowing, peach 28:279
Virus, peach blotch
blotch, peach 36:274
chlorosis, peach 36:274
Virus, peach buckskin
dwarfing, peach 35:611
pathological histology 31:923; 35:613, 614, 616, 617, 620, 622, 624, 629
Virus, peach calico
chlorosis, peach 34:652
yellowing, peach 34:652
Virus, peach little peach
dwarfing, peach 26:203, 214
rosetting, peach 26:203
Virus, peach mosaic
chlorosis, peach 28:280; 31:325
chlorosis, prune 31:325
hyperplasia, peach 31:324
proof of pathogenicity 31:331

chlorosis, peach 31:354
distortion, peach 31:354
rosetting, cherry 21:379
rosetting, peach 26:208
wilt, peach 26:207
Virus, peach suture spot
fruit spot, peach 33:189
Virus, peach tatter leaf
chlorosis, cherry 36:76
chlorosis, peach 36:76
Virus, peach wart
chlorosis, cherry 35:609
dieback, cherry 35:609
infection, influenced by age of host tissue, cherry 31:609
tumefaction, peach 33:22, 24
Virus, peach yellows
abscission, leaf, peach 30:324
disease resistance, recovery, peach 26:812, 813, 818
leaf spot, peach 30:325
rosetting, peach 26:275; 28:493
reddening, peach 26:204
yellowing, peach 28:493
Virus, peach yellow bud mosaic
dissemination of 34:659
dwarfing, peach 34:659
Virus, pear stony pit
bark scaling, pear 29:263
distortion, pear 29:261
internal necrosis, pear 29:261
pitting, pear 29:261
reddening, pear 29:263
Virus, pecan
distortion, pecan 27:606
fasciculation, pecan 27:605, 607, 608
Virus, Phaseolus ?
chlorosis, bean 38:726
infection, effect temperature on, soybean 38:727
Virus, Phenax sonnerati mosaic
chlorosis, Phenax sp. 33:395, 396
Virus, Pittosporum
bark scaling, Pittosporum sp. 37:193
chlorosis, Pittosporum sp. 37:193
Virus, plum line pattern
vein banding, plum 35:992
chlorosis, cherry 35:992
chlorosis, peach 35:995
chlorosis, plum 35:993, 995
Virus, plum mosaic
chlorosis, plum 31:1002
Virus, potato
dwarfing, potato 10:37
top necrosis, potato 21:602, 603

Virus, [illegible]
[illegible], Nicotiana sp. 29:48
Virus, potato A plus potato mild mosaic
top necrosis, potato 29:48
Virus, potato scuba mosaic
chlorosis, potato 16:936
chlorosis, tobacco 29:919
Virus, potato B
top necrosis, potato 29:60, 175
Virus, potato C
leaf spot, potato 26:604; 35:593
savoying, potato 35:593
top necrosis, potato 26:604
Virus, potato calico
infection with this virus "protects" against subsequent infection with alfalfa mosaic virus, tobacco 30:446
yellowing, pepper 29:930
Virus, potato Canada streak
leaf necrosis, potato 29:921, 922
Virus, potato crinkle mosaic
chlorosis, potato 26:603
distortion, potato 26:603
Virus, potato crinkle A
chlorosis, potato 26:603
Virus, potato green dwarf
curl, potato 36:673, 674
dwarfing, potato 36:672, 673
Virus, potato giant hill
fasciculation, potato 24:579
hyperplasia, potato 24:579
Virus, potato late break
curl, potato 39:464, 465
etiolation, potato 39:464
heterotophy, potato 39:464, 465
Virus, potato latent mosaic
dwarfing, potato 26:796
heterotophy, potato 26:796
Virus, potato healthy virus
chlorosis, pepper 17:776, 778
Virus, potato leaf roll
curl, Physalis sp. 38:506
curl, potato 8:509, 510, 511, 514, 515, 516, 518, 522, 523, 524, 525, 526; 17:560
dwarfing, potato 8:512, 516, 523, 524, 525
lack of starch movement in diseased host, potato 10:44, 45
losses 8:512
pathological histology 21:596
yellowing, potato 8:518
Virus, potato leaf rolling mosaic
curl potato 29:50
Virus, potato mild mosaic
chlorosis, potato 26:603; 29:47
distortion, potato 26:603; 29:47
veinclearing, Nicotiana sp. 29:48

Virus, potato mild mosaic plus potato A virus
top necrosis, potato 29:48
Virus, potato mosaic
chlorosis, potato 12:138; 16:610
infection, effect temperature on, potato 12:439; 16:610
proof of pathogenicity 8:494
Virus, potato net necrosis
[illegible]
Virus, potato paracrinkle
chlorosis, potato 26:601; 29:50
leaf spot, potato 26:601
savoying, potato 29:50
Virus, potato pseudo net-necrosis
leaf spot, potato 29:926
Virus, potato purple top wilt
pathological histology 29:277
Virus, potato ring-spot
ring-spot, potato 23:331
ring-spot, tobacco 28:908
Virus, potato ring-spot plus cucumber mosaic virus
systemic necrosis, tobacco 28:908
Virus, potato rugose mosaic
chlorosis, potato 23:322; 29:52
chlorosis, tobacco 23:331
pathological histology 21:599
savoying, potato 29:52
Virus, potato spindle-tuber
distortion, potato 16:305
Virus, potato streak
blotch, tobacco 29:919
chlorosis, potato 29:922
streak, potato 10:98, 100
vascular necrosis, potato 29:923
Virus, potato top necrosis
pathological histology 21:597, 599
vascular necrosis, potato 21:605, 606
Virus, potato tuber blotch
chlorosis, tobacco 29:919
Virus, potato X
epinasty, Gomphrena sp. 41:436
leaf spot, Amaranthus sp. 29:58
Virus, potato Y
abscission, leaf, potato 26:599; 29:52
epinasty, Physalis sp. 41:432
epinasty, potato 41:436
infection with this virus not prevented by prior infection
with cucumber mosaic virus, Physalis sp. 40:446, 448
Virus, potato yellow dwarf
chlorosis, Nicotiana sp. 41:434
cracking, potato 12:132
distribution map 12:124
internal necrosis, potato 12:132
leaf spot, Nicotiana sp. 28:888; 41:434
leaf spot, potato 41:435
leaf spot, tomato 41:436
reddening, tomato 41:486
yellowing, Nicotiana sp. 28:888

Virus, plum
  canker, plum 31:889, 890, 891
  dwarfing, prune 26:1146
  leaf spot, prune 30:347
Virus, prune diamond canker
  pathological histology 31:889
Virus, prune dwarf
  chlorosis, cherry 34:1045
  chlorosis, peach 32:746, 747
  chlorosis, plum 34:1042
  chlorosis, prune 34:1045
  distortion, peach 32:747
  distortion, plum 34:1042
  distortion, prune 32:745; 34:1045
  dwarfing, peach 32:748; 34:1042
  dwarfing, plum 32:744
  dwarfing, prune 32:744, 745; 34:1042
  ring-spot, prune 32:745
  rosetting, peach 32:749
  savoying, peach 32:748
Virus, Prunus veinclearing
  distortion, cherry 31:365
  silvering, cherry 31:465
Virus, Pseudomonas tabaci phage 1
  morphology 40:938, 941, 944
Virus, Pseudomonas tabaci phage 2
  morphology 40:938, 940, 941
Virus, Pyracantha gibbsii yunnanensis
  rough bark, pear 32:436
  rough bark, Pyracantha sp. 32:436
  rough bark, rose 32:436
Virus, rape mosaic
  chlorosis, rape 30:339
  dwarfing, leaf mustard 30:341
  savoying, leaf mustard 30:341
  veinbanding, Chinese cabbage 30:339
  veinbanding, turnip 30:339
  veinclearing, turnip 30:339
Virus, raspberry
  fasciculation, raspberry 21:756
  fern leaf, raspberry 21:755
Virus, raspberry alpha and beta
  savoying, raspberry 20:795
Virus, raspberry decline
  curl, raspberry 33:157
  losses 33:158, 159
Virus, raspberry mild streak
  chlorosis, raspberry 39:381
  curl, raspberry 39:381
  dwarfing, raspberry 38:223; 39:382
  streak, raspberry 38:223; 39:382
Virus, rhododendron
  rosetting, rhododendron 10:278

Virus, Robinia pseudoacacia
fasciculation, Robinia sp. 23:86, 87
Virus, (broad) ring-spot
distortion, Nicotiana sp. 32:607
distortion, tobacco 32:607
distortion, tomato 32:606
ring-spot, sunflower 32:607
ring-spot, tobacco 32:606
ring-spot, tomato 32:606
Virus, rose mosaic
chlorosis, rose 22:57, 59, 60, 62, 64
Virus, sandal spike disease
x-bodies of 18:815, 816, 817; 23:195, 198
Virus, Soja 1
chlorosis, soybean 38:726
distortion, soybean 38:726
infection, effect temperature on, soybean 38:729
savoying, soybean 38:726
Virus, Solanum 4
leaf spot, Hyoscyamus sp. 29:175
yellowing, Datura sp. 29:175
Virus, spotted wilt
chlorosis, Datura sp. 30:292
chlorosis, Emilia sp. 30:304
chlorosis, pepper 30:292
chlorosis, tomato 30:302
curl, Cineraria sp. 34:942, 943, 945
curl, Nicotiana sp. 30:294
curl, tobacco 30:292
curl, tomato 24:944; 30:300
fruit spot, pea 26:919
fruit spot, tomato 30:301
fruit rot, pineapple 21:868
leaf necrosis, potato 30:309
leaf spot, bean 30:291
leaf spot, celery 30:291
leaf spot, Cineraria sp. 34:944
leaf spot, Datura sp. 30:294
leaf spot, eggplant 30:292
leaf spot, Emilia sp. 22:305, 307,; 30:310
leaf spot, endive 30:294
leaf spot, Nicotiana sp. 30:294
leaf spot, pepper 30:292
leaf spot, pineapple 21:866, 867, 876; 28:302, 303
leaf spot, potato 29:163; 30:291, 309
leaf spot, spinach 30:291
leaf spot, tobacco 30:292
leaf spot, tomato 24:944; 30:286, 300, 301, 302, 303, 307
ring-spot, Datura sp. 30:294
ring-spot, tobacco 30:292
seed spot, pea 26:919
streak, bean 30:291
streak, Cineraria sp. 34:943
wilt, Cineraria sp. 34:945

chlorosis, squash 34:406, 407
distortion, squash 34:406, 407
Virus, strawberry
savoying, strawberry 23:739
yellowing, strawberry 16:425; 23:655
Virus, strawberry crinkle
chlorosis, strawberry 22:711; 23:739
distortion, strawberry 22:711
Virus, strawberry dwarf
dwarfing, strawberry 18:440
pathological histology 18:443
Virus, strawberry leafroll
curl, strawberry 32:632
Virus, strawberry witches' broom
rosetting, strawberry 17:329, 331
Virus, fragaria (strawberry) 5
dwarfing, strawberry 31:860
Virus, streak
fruit spot, tomato 16:316
Virus, sugar-beet
savoying, sugar-beet 32:329
Virus, sugar beet curly top
bending of roots, sugar-beet 7:272
black tip, sugar-beet 7:282
chlorosis, sugar-beet 7:281
curl, flax 38:1001
curl, bean 20:781
curl, muskmelon 38:934, 935
curl, Oxalis sp. 19:1032
curl, Suaeda sp. 15:757
curl, sugar-beet 15:757; 36:39
curl, tobacco 29:745; 33:596
curl, tomato 41:416
disease resistance, bean 22:208
disease resistance, sugar-beet 22:207; 27:775; 36:39
distortion, flax 35:603, 604
distortion, sugar-beet 5:104, 106, 336, 348; 7:270; 27:774, 775
dwarfing, buckwheat 9:421
dwarfing, Chenopodium sp. 9:418
dwarfing, Erodium sp. 9:415
dwarfing, Medicago sp. 9:417
dwarfing, squash 28:654
dwarfing, Stellaria sp. 9:420
dwarfing, Urtica sp. 9:419
effect grafting tobacco disease with this virus, upon healthy tobacco 30:678
enations, beet 27:774, 775
fasciculation, flax 35:603, 605
pathological histology 5:105, 342; 23:687, 688, 690, 692, 693, 69
701, 705, 24:304, 1116, 1117
proliferation, flax 35:605

Virus, sugar-beet curly top (con't.)
proof of pathogenicity 9:415, 417, 418, 419, 420
recovered plants are "protected" against re-infection by same virus, tobacco 29:748
recovery of plant from infection with this virus, tobacco 29:746
recovery of plant from infection with this virus, tomato 28:829, 841
suppression, flax 35:604, 605
veinclearing, sugar-beet 9:414; 18:690; 27:774
virescence, flax 35:605
wilt, squash 28:654
Virus, sugar-beet mosaic
chlorosis, Melilotus sp. 39:671
chlorosis, spinach 23:457, 462
chlorosis, sugar-beet 23:452
leaf spot, tobacco 23:457, 458
pathological histology 11:355
Virus, sugar-beet savoy
dissemination of 32:330
Virus, sugar-beet yellow net
chlorosis, sugar-beet 38:430
chlorosis, Swiss chard 38:432
yellowing, sugar-beet 38:430
yellowing, Swiss chard 38:432
Virus, sugarcane chlorotic streak
streak, sugarcane 28:856
Virus, sugarcane Fiji disease
rosetting, sugarcane 11:334
tumefaction, sugarcane 11:336
Virus, sugarcane mosaic
chlorosis, corn 41:760
chlorosis, sugarcane 24:1041
proof of pathogenicity 41:760
Virus, sugarcane streak
streak, sugarcane 23:675
Virus, sweet potato internal cork
pathological histology 36:20
vascular necrosis, sweet potato 36:19
Virus, sweet potato mosaic
chlorosis, sweet potato 19:934, 936, 940
infection, effect temperature on, sweet potato 19:940
Virus, Tigridia mosaic
chlorosis, Tigridia sp. 34:594
Virus, tobacco
tumefaction, tobacco 37:581
Virus, tobacco acuba mosaic
infection with this virus prevented by previous infection with tobacco mosaic virus, tobacco 24:445, 447, 449 455, 457, 460
chlorosis, Nicotiana sp. 24:443, 445
leaf spot, Nicotiana sp. 24:445, 447, 455, 457, 460
Virus, tobacco etch
chart showing taxonomic relationships of plants susceptible to the virus 36:655
chlorosis, tobacco 41:1125
disease resistance, tobacco 41:1125

Virus, tobacco etch, mild etch strain
[illegible] virus, type [illegible]
[illegible] etch severe etch strain
chlorosis, Nicotiana sp. 38:845
infection with this virus prevented by previous infection by mild-etch strain of this virus, Physalis sp. 32:1063
infection with this virus does not "protect" against subsequent infection with strain 6 of the cucumber mosaic virus, zinnia 35:770
leaf spot, Physalis sp. 32:1051
systemic necrosis, Physalis sp. 32:1051
Virus, tobacco kroemeek
emulsions, tobacco 23:178, 177
pathological histology 23:179, 180, 181, 182, 185, 186, 187
Virus, tobacco leaf-curl
[illegible] shortleaf, Datura sp. 38:287
distortion, potato 38:287
distortion, tobacco 37:866
distortion, tomato 33:665, 667
dwarfing, potato 38:287
dwarfing, tomato 39:345, 367
morphology 39:225, 227; 41:96
spraying, tobacco 28:367
Virus, tobacco mosaic
abscission, leaf, pepper 24:988
cell inclusions, tobacco 31:681
chart showing taxonomic relationships of plants susceptible to this virus 36:835
chlorosis, Browallia sp. 28:365
chlorosis, Capsicum sp. 24:319
chlorosis, pepper 24:988
chlorosis, petunia 6:334
chlorosis, Phaseolus sp. 24:319
chlorosis, Physalis sp. 36:845
chlorosis, pokeweed 8:53
chlorosis, tobacco 11:456; 19:119; 23:681; 24:847, 859, 861
chlorosis, tomato 30:640
chlorosis, zinnia 24:319
disease measurement 36:1046; 41:601
disease resistance, Nicotiana spp. 37:850
disease resistance, tobacco 28:287; 31:1141
disease resistance, tomato 27:82
distortion, Browallia sp. 28:365
distortion, Cynoglossum sp. 24:320
distortion, Tagetes sp. 24:320
distortion, tobacco 24:847, 859; 28:914
distribution map of Nicotiana spp. and their reactions to infection by this virus 41:601
dwarfing, Cynoglossum sp. 24:320
dwarfing, Nicotiana sp. 37:824
dwarfing, Tagetes sp. 36:320
dwarfing, tobacco 6:334
[illegible] shortleaf, Datura sp. 41:496
spinescy, Nicotiana sp. 41:485
infection, influenced by gaseous vapors [illegible] sp. 31:900
infection, influenced by [illegible] of host, [illegible]

Virus, tobacco mosaic(con't.)
infection, influenced by temperature, tobacco 11:415, 28:442
infection with this virus prevented by previous infection with rib-grass strain of this virus, tobacco 31:1090
infection with this virus "protects" against subsequent infection with tomato rosette strain of this virus, Nicotiana sp. 41:1094
infection with this virus "protects" against subsequent infection with acuba mosaic, tobacco 24:445, 447, 449, 455, 457, 460
leaf spot, Capsicum sp. 24:987, 988, 1071
leaf spot, cucumber 39:809
leaf spot, Nicotiana spp. 24:850, 994, 1071; 26:268
leaf spot, Nicotiana sp x Nicotiana sp. 37:827
leaf spot, Phaseolus sp. 24:1071; 31:434, 435, 436
leaf spot, tobacco 24:1071; 33:213
morphology 26:312; 29:254; 30:669, 670; 32:295; 37:28, 30, 32, 35, 36, 74; 38:855; 41:80, 82, 84, 88, 89
[illegible] 606; 33:641; 38:855
proof of pathogenicity 6:333, 334
root lesions, Nicotiana spp. 31:582
savoying, Phacelia sp. 24:319
strains of, culture of in plant, tobacco 37:824, 826, 833
strains of, production of, effect of temperature on, tobacco 37:830
stripe, tomato 30:539
x-bodies 24:332; 32:295
Virus, tobacco mosaic, distortion strain
[illegible]
Virus, tobacco mosaic, mild strain
disease resistance, Nicotiana sp. 41:598, 601, 605
disease resistance, tobacco 41:598
leaf spot, Nicotiana spp. 41:595, 593
Virus, tobacco mosaic, severe strain
leaf spot, Nicotiana sp. 41:595
Virus, tobacco mosaic plus cucumber mosaic
distortion, tomato 26:921, 923
Virus, tobacco mosaic, rib-grass strain
chlorosis, Plantago sp. 31:1090
chlorosis, tobacco 31:1090
infection with this virus "protects" against subsequent infection with type strain of tobacco mosaic virus, tobacco 31:1090
leaf spot, tobacco 31:1090
morphology 31:1094
Virus, tobacco mosaic, strain 14
stem necrosis, tobacco 27:75
Virus, tobacco mosaic, strain 302A
infection with this virus prevented by previous infection with acuba mosaic virus, zinnia 25:786
infection with this virus not prevented by previous infection with Porter's strain of cucumber mosaic virus, zinnia 25:787
leaf spot, zinnia 25:786, 787
Virus, tobacco mosaic, strain C, superimposed on prior infection by strain A of tobacco mosaic virus
leaf spot, Nicotiana sp. 41:582, 585
Virus, tobacco mosaic, strain K13
blight, tomato 28:681

Virus, tobacco mosaic, strain N2
leaf spot, tobacco 33:673
yellowing, tobacco 33:673
Virus, tobacco mosaic, strain N4
ring-spot, tobacco 33:679
Virus, tobacco mosaic, strain Wal
blight, tomato 33:671
yellowing, tobacco 29:661
Virus, tobacco mosaic, strain WSB
leaf spot, tobacco 29:668
yellowing, tobacco 29:683
Virus, tobacco mosaic, yellow mutant
morphology 30:74
Virus, tobacco yellow mosaic, mutant BSY
disease resistance, tobacco 33:653
infection, influenced by age of tissues, tobacco 33:650
infection, influenced by temperature, tobacco 33:652
pathological histology, 33:654
Virus, yellow tobacco mosaic
leaf spot, tobacco 26:49
yellowing, tobacco 26:73, 74, 76
Virus, yellow mosaic strains of tobacco mosaic
chlorosis, Nicotiana spp. 28:967; 28:900
chlorosis, tobacco 21:209; 28:967, 971; 26:900
chlorosis, tomato 28:967; 28:900
Virus, tobacco mosaic, leaf abrivel_ing strain
[illegible] 28:967, 971
leaf spot, tomato 28:967
yellowing, tomato 28:967
Virus, tobacco mosaic, tomato rosette strain
reaction with this virus provoked by previous infection with t[illegible]
strain of tobacco mosaic virus, Nicotiana sp. 41:1024
Virus, tobacco necrosis
chlorosis, tobacco 28:324, 323
Virus, tobacco necrosis
dwarfing, tulip 40:300
leaf spot, cowpea 40:302
leaf spot, tobacco 29:35
leaf spot, tulip 40:300
sedimentation diagram 29:37
Virus, tobacco ring-spot
blight, soybean 36:320
chlorosis, cucumber 34:73
chlorosis, spinach 28:437, 460
chlorosis, tobacco 34:59
curl, tobacco 31:681
dwarfing, cucumber 34:73
dwarfing, petunia 21:230
fruit spot, soybean 36:320
infection, influenced by gaseous vapors, tobacco 33:79
leaf spot, bean 24:96, 97

leaf spot, cowpea 26:507
leaf spot, tobacco 34:63, 66
losses, tobacco 31:527
recovery of plant from virus 26:505, 506
ring-spot, Nicotiana sp. 26:671
ring-spot, tobacco 17:321, 323, 324, 325, 326, 327;
21:226; 23:328; 26:504, 670; 28:912, 914
seed-spot, soybean 36:321
yellowing, tobacco 31:524
Virus, tobacco ring-spot No. 1
infection with this virus does not prevent subsequent infection
with virus ring-spot No. 2, tobacco 26:669, 670, 671
infection with this virus "protects" against infection with
tobacco green ring-spot virus, tobacco 26:669, 670, 671
Virus, tobacco ring-spot No. 2
infection with this virus not prevented by previous infection with
ring-spot of tobacco virus No. 1, tobacco 26:669, 670, 671
Virus, tobacco broken ring-spot
chlorosis, bean 34:327
leaf spot, bean 34:327
ring-spot, tobacco 34:325
Virus, tobacco green ring-spot
infection with this virus prevented by previous infection with
tobacco ring-spot of tobacco virus No. 1, tobacco
26:669, 670, 671
Virus, tobacco severe-etch
distortion, Nicotiana sp. 36:645
leaf spot, Nicotiana sp. 36:645
leaf spot, Physalis sp. 36:645
Virus, tobacco spot-necrosis
chlorosis, tobacco 23:324
Virus, tobacco streak
chlorosis, clover 40:517
distortion, burdock 38:422
distortion, tobacco 35:1029
leaf spot, clover 40:517
leaf spot, guar 38:426
leaf spot, tobacco 40:129
streak, tobacco 26:286, 287, 288
veinclearing, burdock 38:422
Virus, tobacco veinbanding
chlorosis, tobacco 23:324
veinbanding, tobacco 23:331; 29:56
Virus, tobacco yellow mosaic
yellowing, tobacco 33:1047, 1048
Virus, tobacco yellow spot
leaf spot, tobacco 24:744
Virus, tomato big bud
pathological histology 23:649; 25:543, 544, 545, 547, 548, 551,
552, 555; 30:868
prolepsis, tomato 23:643, 644, 645, 647
proliferation, tomato 23:644
tumefaction, tomato 23:643; 30:867
Virus, tomato bushy stunt
morphology 38:950, 952, 953

Virus, [illegible]
ring-spot, Datura sp. 32:1039
ring-spot, tobacco 32:1039
ring-spot, tomato 32:1038
Virus, tomato rosette
chlorosis, tobacco 41:1094
formless, tomato 41:1092
rosetting, tomato 41:1092
Virus, tomato streak
streak, tomato 16:312, 315
Virus, tomato tip blight
blight, tomato 23:157
leaf spot, Datura sp. 29:163
leaf spot, Nasturtium sp. 29:163
leaf spot, potato 29:163
leaf spot, Solanum sp. 29:158
leaf spot, tobacco 29:164
leaf spot, tomato 29:158
streak, tomato 29:157
Virus, tomato top necrosis
leaf veinal necrosis, potato 21:601
Virus, Trifolium 1
dwarfing, clover 32:105
Virus, tulip mosaic
chlorosis, lily 30:251
color break, tulip 30:173
curl Lilium sp. 30:253
Virus, tulip 1
chlorosis, lily 34:721, 724, 725
chlorosis, tulip 34:725
color break, tulip 34:722
Virus, tulip 2
chlorosis, lily 34:721, 724, 725
chlorosis, tulip 34:725
color break, tulip 34:722
Virus, tung
rough bark, tung 39:718
Virus, Vicia faba mild mosaic
savoying, Vicia sp. 29:449
Virus, watermelon mosaic
chlorosis, watermelon 23:742, 743
distortion, watermelon 23:742, 743
Virus, Xanthomonas pruni bacteriophage
morphology 38:903, 909; 40:877

Wojnowicia graminis
growth in cult. 25:413
pycnidia 25:415

Xanthomonas begoniae (See: Phytomonas begoniae)
beticola (See: Phytomonas beticola)
campestris (See also: [illegible])
cotyledon rot, cabbage 41:821
carotae (See: Phytomonas carotae
citri (See also: Bacterium citri; Pseudomonas citri)
corylina (See: Phytomonas corylina)
geranii (See: Phytomonas geranii)
juglandis (See: Phytomonas juglandis)
malvacearum (See also: Bacterium malvacearum, Phytomonas malvacearum)
dis. resistance, cotton 41:499
dissemination 39:89
pathogen in host, cotton 41:506
pathological histology 41:506
phaseoli (See also: Bacterium phaseoli)
blight, bean 38:758
dis. resistance, bean 38:758
growth in cult. 34:687; 36:596
phaseoli plus Marmor phaseoli
chlorosis, bean 34:685
dwarfing, bean 34:685
growth in cult. 36:596
phaseoli var. sojense
infection, influenced by stomatal behavior, soybean 36:386
phaseoli var. sojensis (See: X. phaseoli var. sojense)
pruni (See: Phytomonas pruni)
translucens
chlorosis, Bromus sp. 40:47
dis. measurement 40:48
leaf spot, Bromus 40:47
translucens var. cerealis
leaf spot, barley 36:455
ooze 36:455
pathological histology 36:455
translucens var. phleipratensis
streak, timothy 35:938
vasculorum (See: Bacillus vasculorum, Phytomonas vasculorum)
vesicatoria (See: Bacterium vesicatorium)
vesicatoria var. raphani (See: Bacterium vesicatorium var. raphani)
Xylaria apiculata
growth in cult. 31:938
rhizomorphs 31:937
stromata 31:938
tuber rot, potato 31:937
[illegible]
macroscopic mycelium 32:92
proof of pathogenicity 32:91
seed spot, Ginkgo sp. 32:92
mali
root rot, apple 28:454, 483
polymorpha
pathological histology 27:1176